

**SHARP****SERVICE MANUAL**

230-90432994



LCD COLOUR  
TELEVISION (Display)

MODEL **LC32GD7E**

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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**SHARP CORPORATION**



## Note on electrostatic shielding


### 1. Electrostatically shielded MOS workstations

Components sensitive to electrostatic discharge must be handled at workstation with electrostatic shielding. An electrostatically shielded MOS workstation is fitted with discharge resistor which earth all conductive materials, including the technician working there. Dielectrics are discharged by air ionisation. The use of soldering irons and measuring equipment at shielded workstation is only possible in conjunction with isolating transformer in each of the devices used. Measuring equipment chassis are also earthed with discharge resistors.

### 2. Shielded packaging using conductive materials

To protect against electrostatic charges, electrically conductive plastics are used for packaging and transport purposes. Conductive plastics are available in the form of transparent protective bags, foam plastic, film sheeting or containers. Sensitive components requiring the use of protective packaging must only be packed and unpacked at shielded workstations.

## Safety warnings/regulations

1. The repair, modification and testing of mains-operated electronic devices and their accessories must only be performed by qualified persons.
2. It is necessary to follow the regulations and safety warnings to VDE 0701, part 200, as well as the regulations and safety warnings applicable in the country concerned.
3. VDE 0701, Part 2, contains regulations on the repair, modification and testing of mains-operated electronic devices and their accessories.
4. Before delivery, the device and the connecting leads (including any protective earth conductor fitted) must undergo visual inspection, and the insulation resistance and the equivalent leakage current must be measured according to VDE 0701, part 200. The low-resistance continuity of the protective earth conductor must be verified by measurement to VDE regulation 0701, part 1.
5. The regulations of the country concerned must also be observed.
6. Only genuine parts must be used for replacing components marked with the symbol .

## Precautions for using lead-free solder

### 1. Employing lead-free solder

„LCD CONT PWB“, „TMDS RX PWB“, „KEY PWB“, „R/C LED PWB“, „MOTOR PWB“, „INV PWB“, „POWER PWB“ of this model employs lead-free solder. The LF symbol indicates lead-free solder, and is attached on the PWBs and service manuals. The alphabetical character following LF shows the type of lead-free solder. Example:

**LF** a  
Sn-Ag-Cu

~~Pb~~

Indicates lead-free solder of tin, silver and copper.

### 2. Using lead-free wire solder

When fixing the PWB soldered with the lead-free solder, apply lead-free wire solder. Repairing with conventional lead wire solder may cause damage or accident due to cracks.

As the melting point of lead-free solder (Sn-Ag-Cu) is higher than the lead wire solder by 40°C, we recommend you to use a dedicated soldering bit, if you are not familiar with how to obtain lead-free wire solder or soldering bit, contact our service station or service ranch in your area.

### 3. Soldering

As the melting point of lead-free solder (Sn-Ag-Cu) is about 220°C which is higher than the conventional lead solder by 40°C, and as it has poor solder wettability, you may be apt to keep the soldering bit in contact with the PWB for extended period of time. However, Since the land may be peeled off or the maximum heat-resistance temperature of parts may be exceeded, remove the bit from the PWB as soon as you confirm the steady soldering condition.

Lead-free solder contains more tin, and the end of the soldering bit may be easily corroded. Make sure to turn on and off the power of the bit as required. If a different type of solder stays on the tip of the soldering bit, it is alloyed with lead-free solder. Clean the bit after every use of it.

When the tip of the soldering bit is blackened during use, file it with steel wool or fine sandpaper.

#### Lead-free wire solder for servicing

Be careful when replacing parts with polarity indication on the PWB silk.

Part No.	★	Description	Code
ZHNDai123250E	J	φ 0.3mm 250g(1roll)	BL
ZHNDai126500E	J	φ 0.6mm 500g(1roll)	BK
ZHNDai12801KE	J	φ 1.0mm 1kg(1roll)	BM

## Rear panel removal

1. Place the set on a clean and soft base.
2. Open the 4 screws (fig. 1).
3. Open the 18 screws (fig. 2).
4. Mount stand for service position.



Fig. 1

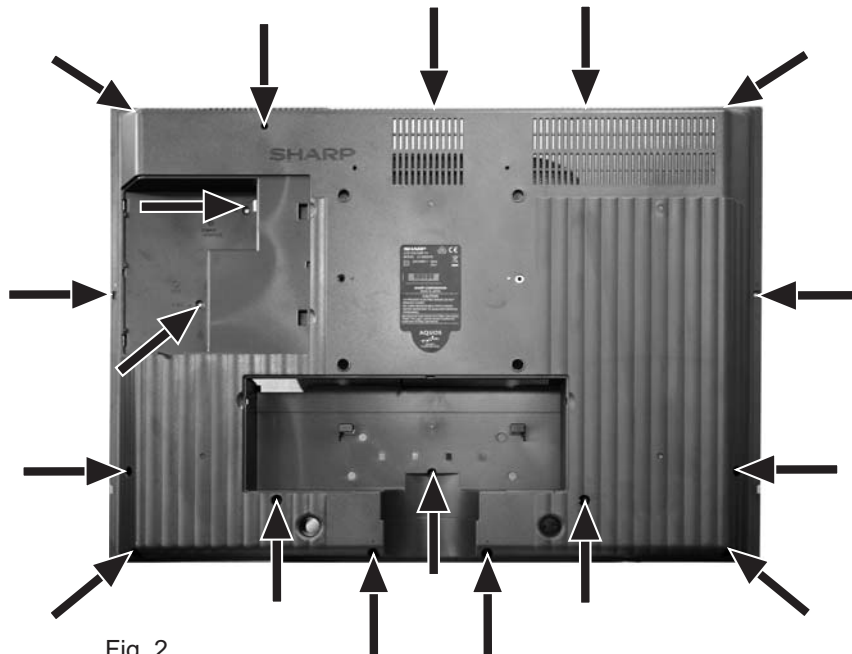
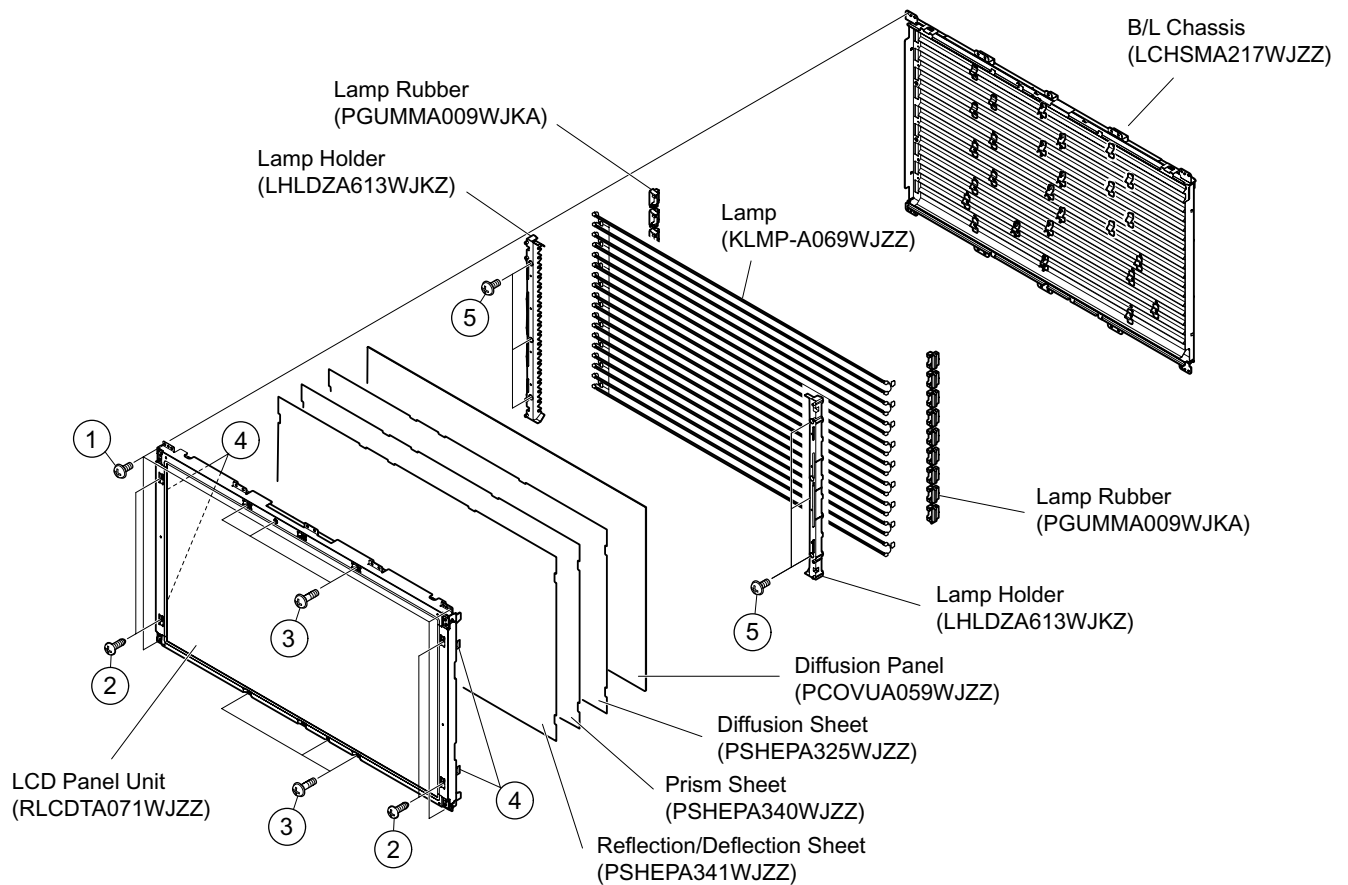


Fig. 2

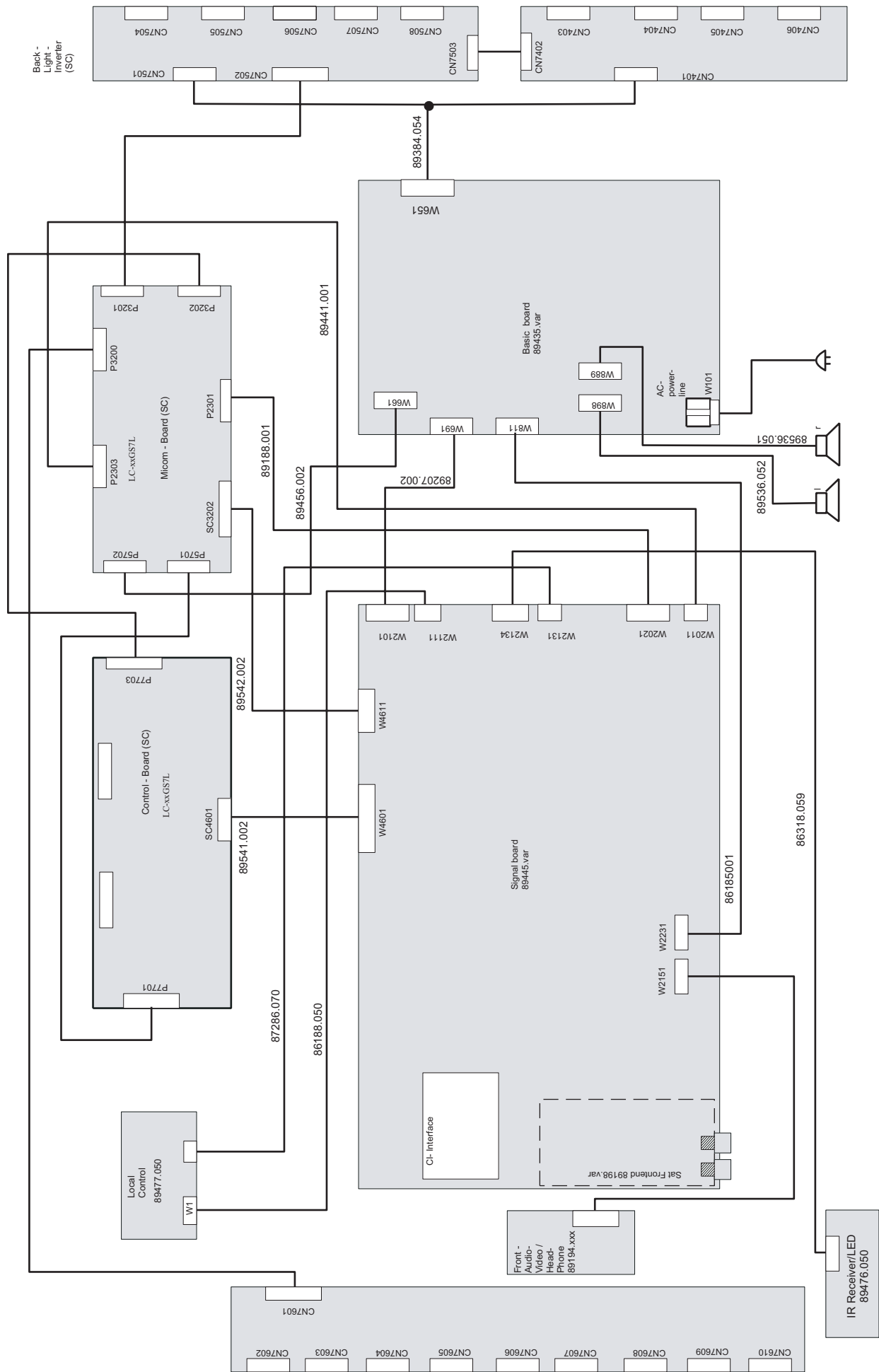


# REMOVING OF MAJOR PARTS

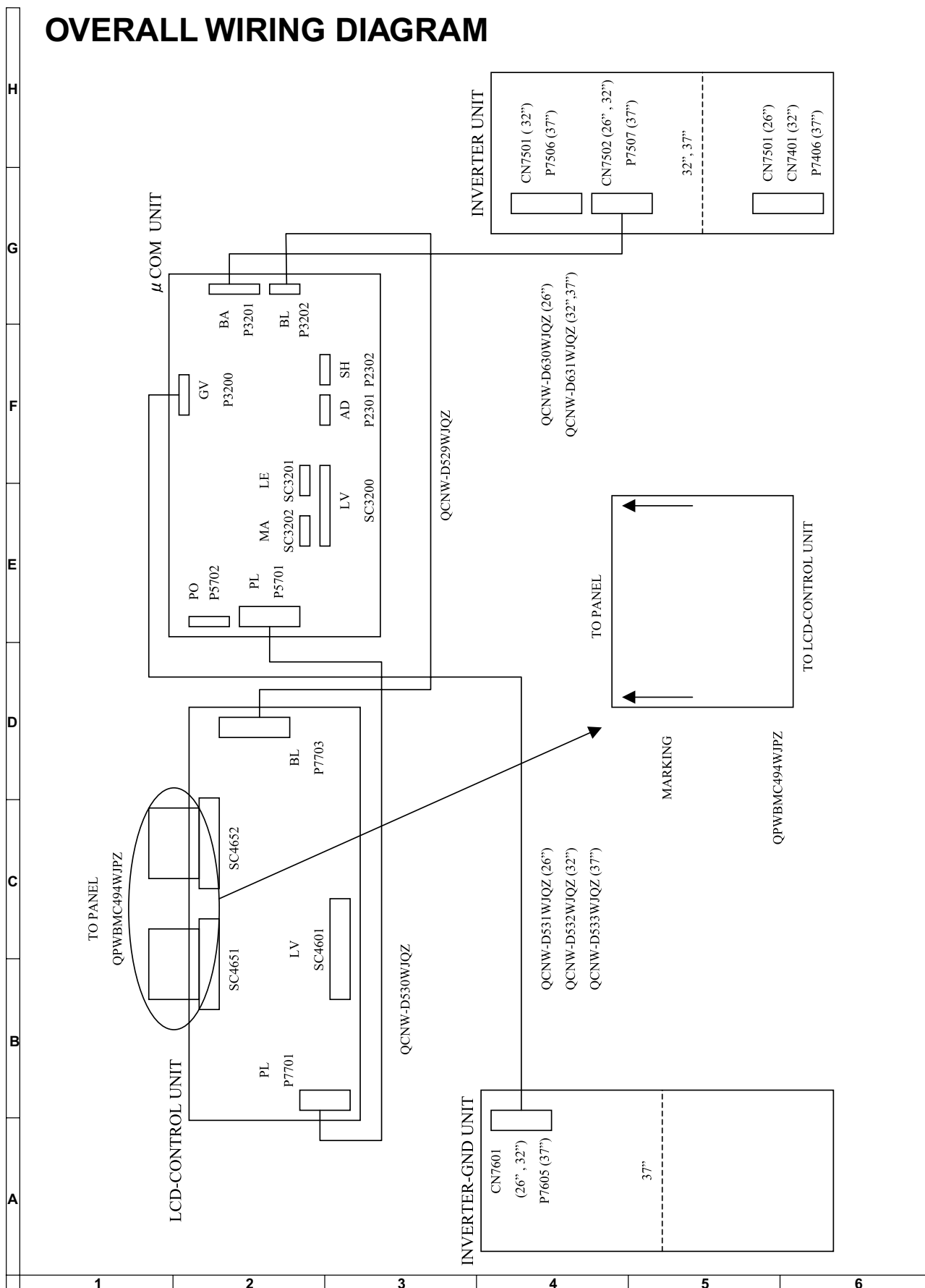
1. Remove the 4 lock screws ①, 4 lock screws ②, 6 lock screws ③ from the LCD Panel Unit.
2. Detach the 4 hooks ④ from the B/L Chassis, and lift off the LCD Panel Unit.
3. Detach the Prism, Diffusion and Reflection/Deflection Sheets and Diffusion Panel.
4. Remove the 6 lock screws ⑤ from the Lamp Holder, and detach the Lamp Holder.



Wiring diagram L2650



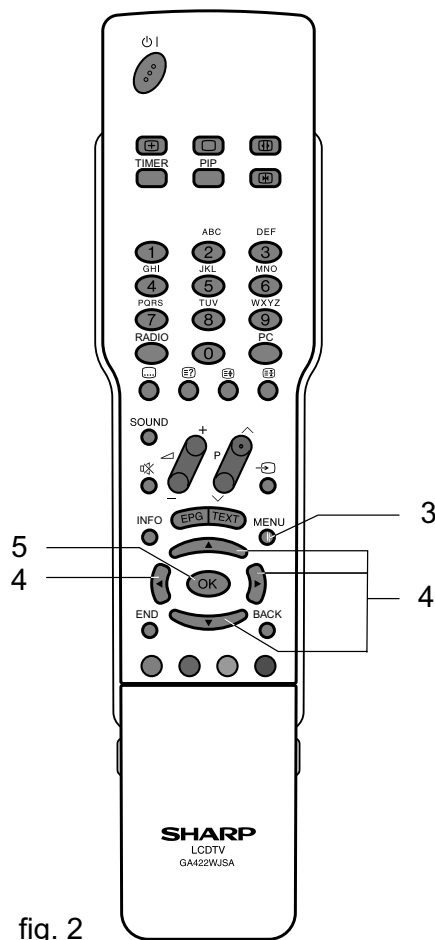
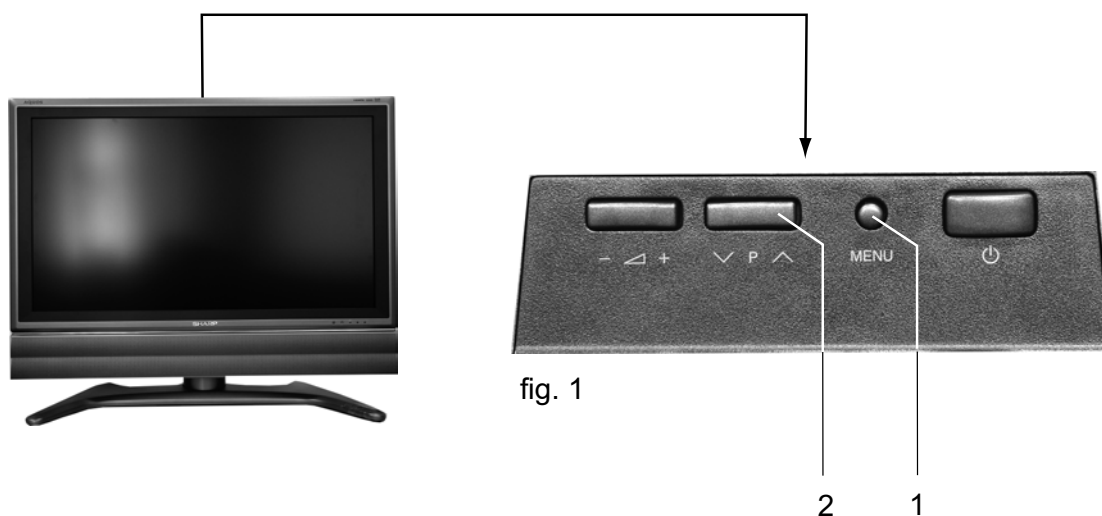
# OVERALL WIRING DIAGRAM



## Enter service mode

Pre-setup position: set is in TV mode

1. Press MENU button on top of the TV set to enter menu „direct control on tv set“ (fig. 1, pos. 1)
2. Press button „P ^“ until „service“ is shown in menu (fig. 1, pos. 2)
3. When service appears press the MENU button on the remote control within 1 sec (fig. 2, pos. 3). Service menu appears.
4. Step with cursor buttons on remote control (fig. 2, pos. 4) through the service menu to change settings.
5. Each modification of any value has to be memorized with the „OK“ button on remote control (fig. 2, pos. 5).



# ADJUSTMENT PROCEDURE

The adjustment values are set to the optimum conditions at the factory before shipping. If a value should become improper or an adjustment is required due to part replacement, make an adjustment according to the following procedure.

## 1. Display adjustment procedure

### 1. Adjustment procedure

Enter the display process mode and then adjust COM BIAS.

**Caution: Use due care in handling the information described here lest your users should know how to enter the adjustment process mode. If the settings are tampered in this mode, unrecoverable system damage may result.**

### 2. Adjustment process mode key operation table

Key	Function 1 (when on the left side of a page)	Function 2 (when changing a numeric value)
Cursor UP	Moving up by one item or moving to the previous page (when at the top)	Incrementing the adjustment value by one or executing the item (in the case of W or R item)
Cursor DOWN	Moving down by one item or moving to the next page (when at the bottom)	Decrementing the adjustment value by one or executing the item (in the case of W or R item)
Cursor RIGHT	Moving to the right by one item or moving to another page (in the case of the initial page)	Moving to the right by one item
Cursor LEFT	Moving to the left by one item or moving to another page (in the case of the initial page)	Moving to the left by one item
OK	Test pattern off	Executing the item (in the case of W or R item)
INPUT mark of the R/C (caution required)	Moving to the next page	Moving to the next page
CH (∧)	Moving up by one item or moving to the previous page (when at the top)	Incrementing the adjustment value by one or executing the item (in the case of W or R item)
CH (∨)	Moving down by one item or moving to the next page (when at the bottom)	Decrementing the adjustment value by one or executing the item (in the case of W or R item)
VOL (+)	Moving to the right by one item or moving to another page (in the case of the initial page)	Moving to the right by one item
VOL (–)	Moving to the left by one item or moving to another page (in the case of the initial page)	Moving to the left by one item

### 3. COM BIAS adjustment

Shift to the [COM BIAS] item with the cursor UP/DOWN key and select a numeric value with the cursor RIGHT/LEFT key.

Changing the numeric value with the cursor UP/DOWN key will make appear the test pattern. Make an adjustment so that the flicker near the center of the screen is minimized.

#### 4. Lamp error detection

##### 4-1. Feature description

This liquid-crystal color TV incorporates a lamp error detection feature (lamp error detection) that automatically turns OFF the power for safety under abnormal lamp or lamp circuit conditions.

If anything is wrong with the lamp or lamp circuit or when the lamp error detection feature is activated for some reason, the following will result.

- ① The power of TV main body is turned OFF about six seconds after it is turned ON. (The power LED on the front of the TV turns red from green and keeps blinking in red (ON for 250ms and OFF for 1sec)).
- ② If occurs five times consecutively, it becomes impossible to turn ON the power. (The power LED keeps blinking in red (ON for 250ms and OFF for 1sec)).

##### 4-2. Measures

###### 1) Checking with lamp error detection OFF

Refer to "Entering and exiting the adjustment process mode" in the section 10-2 to enter the display process mode.

If there is a problem with a lamp or a lamp circuit, the lamp will go out. (The power LED is green.)

Then, you can check the operation to see if the lamp and lamp circuit are abnormal.

###### 2) Resetting the lamp error count

After you have finished checking whether the lamp and lamp circuit are abnormal, reset the lamp error count. If a lamp error is detected five consecutive times, the power cannot be turned on.

Therefore, move to the [L ERR RESET] line, the 5th line on the first page of the "Display process mode", using the Cursor UP/DOWN key. Then, reset the [L ERR RESET] value using the Cursor RIGHT/LEFT key. In this case, press the Cursor UP/DOWN key to reset it to "0".

Table of contents of adjustment process mode Page 0

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	S	E	R	V	I	C	E		I		2	6	A	A	6	L
1	→	C	S	L	E	V	E	L					0	0		
2		C	O	M	B	I	A	S				1	9	0		
3		E	E	R		S	T	B	Y			0	0	0		
4		L		E	R	R		R	E	S	E	T		0		
5		L	C	D												
6		P	A	T	T	E	R	N								
7		F	A	N												
8		O	T	H	E	R										
9			V	E	R		M	2	A	0		B	1	0	1	

32 : 32GA7L  
37 : 37GA7L

Values specific to each display

Reset to "0"

After resetting to "0", perform an operational check to ensure that the lamp error detection feature is not activated.

Table of contents of adjustment process mode Page 0

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	S	E	R	V	I	C	E	I			3	2	A	A	6	L
1	→	C	S	L	E	V	E	L				0	0	0		
2		C	O	M	B	I	A	S			0	0	0	0		
3		E	E	R		S	T	B	Y			0	0	0		
4		L		E	R	R		R	E	S	E	T		0		
5		L	C	D												
6		P	A	T	T	E	R	N								
7		F	A	N												
8		O	T	H	E	R										
9			V	E	R		M	2	A	2		B	1	0	1	

LCD Page 1

	0	1	2	3	4	5	6	7	8	9	A	B	C	D
0	L	C	D	1										0
1	→	P	W	M	C	T	R	L						0
2		P	W	M	F	R	E	Q			0	0	0	0
3		P	W	M	D	U	T	Y			0	0	0	0
4		O	S	C	F	R	E	Q			0	0	0	0
5		O	S	C	D	U	T	Y			0	0	0	0
6		P	M	C	G		M	O	D	E				0
7		P	M	C	G		S	S	C					0
8		D	A	T		D	R	V						0
9		C	L	K		D	R	V						0

LCD Page 2

	0	1	2	3	4	5	6	7	8	9	A	B	C	D
0	L	C	D	2										
1	→	M	O	D	E				6	0	H	Z		0
2		Q	S		S	W								0
3		Q	S		D	1					0	0	0	
4		Q	S		D	2					0	0	0	
5		Q	S		D	3					0	0	0	
6		Q	S		D	4					0	0	0	
7		Q	S		D	5					0	0	0	
8		Q	S		D	6					0	0	0	
9		Q	S		D	7					0	0	0	

LCD Page 3

	0	1	2	3	4	5	6	7	8	9	A	B	C	D
0	L	C	D	3										
1	→	O	P	C		0						0	0	
2		O	P	C		1						0	0	
3		O	P	C		2						0	0	
4		O	P	C		3						0	0	
5		O	P	C		4						0	0	
6		O	P	C		5						0	0	
7		O	P	C		6						0	0	
8		O	P	C		7						0	0	
9		O	P	C		8						0	0	

LCD Page 4

	0	1	2	3	4	5	6	7	8	9	A	B	C	D
0	L	C	D	4										
1	→	O	P	C		9						0	0	
2		O	P	C	1	0						0	0	
3		O	P	C	1	1						0	0	
4		O	P	C	1	2						0	0	
5		O	P	C	1	3						0	0	
6		O	P	C	1	4						0	0	
7		O	P	C	1	5						0	0	
8		O	P	C	1	6						0	0	
9														

LCD Page 5

	0	1	2	3	4	5	6	7	8	9	A	B	C	D
0	L	C	D	5										
1	→	C	S	0	0									0
2		V	H	2	4	7					0	0	0	0
3		V	H	1	9	1					0	0	0	0
4		V	H	1	5	9					0	0	0	0
5		V	H	1	2	7					0	0	0	0
6		V	H	9	5						0	0	0	0
7		V	H	6	3						0	0	0	0
8		V	H	3	1						0	0	0	0
9		V	H	0							0	0	0	0

LCD Page 6

	0	1	2	3	4	5	6	7	8	9	A	B	C	D
0	L	C	D	6										
1	→	V	L	0	3						0	0	0	0
2		V	L	3	1						0	0	0	0
3		V	L	6	3						0	0	0	0
4		V	L	9	5						0	0	0	0
5		V	L	1	2	7					0	0	0	0
6		V	L	1	5	9					0	0	0	0
7		V	L	1	9	1					0	0	0	0
8		V	L	2	4	7					0	0	0	0
9														

PATTERN Page 1

	0	1	2	3	4	5	6	7	8	9	A	B	C	D
0	P	A	T	T	E	R	N	1						
1	→	P	A	T	T	E	R	N	1				0	0
2		P	A	T	T	E	R	N	2				0	0
3		P	A	T	T	E	R	N	3				0	0
4		P	A	T	T	E	R	N	4				0	0
5		P	A	T	T	E	R	N			0	0	0	0
6														
7														
8														
9														

PATTERN Page 2

	0	1	2	3	4	5	6	7	8	9	A	B	C	D
0	P	O	R	T										
1	→	P	1	4		0	0	0	0	H	0	0	0	0
2		P	2	2		0	0	0	0	H	0	0	0	0
3		P	3	0		0	0	0	0	H	0	0	0	0
4		P	3	8		0	0	0	0	H	0	0	0	0
5		P	4	6		0	0	0	0	H	G	0	0	0
6		P	5	4		0	0	0	0	H	0	0	0	0
7		P	6	2		0	0	0	0	H	0	0	0	0
8		P	7	0		0	0	0	0	H	A	A	A	0
9														

Table of contents of adjustment process mode Page 0

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	S	E	R	V	I	C	E	I		3	7	A	D	5		
1	→	C	S	L	E	V	E	L				0	0	0		
2		C	O	M	B	I	A	S				0	0	0	0	
3		E	E	R		S	T	B	Y			0	0	0		
4		L		E	R	R		R	E	S	E	T		0		
5		L	C	D												
6		P	A	T	T	E	R	N								
7		F	A	N												
8		O	T	H	E	R										
9		V	E	R		M	1	0	1		B	1	0	1		

MOTOR Page 1

	0	1	2	3	4	5	6	7	8	9	A	B	C	D
0	F	A	N											
1	→	R	E	S	E	R	V	E						0
2		R	E	S	E	R	V	E						0
3		R	E	S	E	R	V	E						0
4		R	E	S	E	R	V	E						0
5		R	E	S	E	R	V	E						0
6		R	E	S	E	R	V	E						0
7		R	E	S	E	R	V	E						0
8		R	E	S	E	R	V	E						0
9		T	E	M	P		E	R	R			0	0	0

OTHER Page 1

	0	1	2	3	4	5	6	7	8	9	A	B	C	D
0	O	T	H	E	R	1								
1	→	C	L	R		M	O	D	E					0
2													W	0
3		L	C	D		D	A	T	A		0	0	0	0
4											R	0	W	0
5		E	E	P		M			0	0	0	0	0	0
6											R	0	W	0
7														
8														
9														

OTHER Page 2

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	O	T	H	E	R	2			I		3	7	A	D	5	
1	→	L		E	R	R		S	T	O	P			0		
2		M	O	D	E	L								0		
3		R	E	M	O	C	O	N						0		
4																
5		Q	S	T	E	M	P		A	D		0	0	0		
6		O	P	C					A	D		0	0	0		

OTHER Page 3

	0	1	2	3	4	5	6	7	8	9	A	B	C	D
0	O	T	H	E	R	3								
1	→	T	I	M	E	O	U	T		O	N			0
2		P		E	R	R		S	T	O	P			0
3		R	E	S	E	R	V	E						0
4		0	0	0	0	0	0	0	0	0	0	0	0	0
5		0	0	0	0	0	0	0	0	0	0	0	0	0
6		E	T	C		0	0	0	0	0	0	0	0	0
7		R	S	T	C	N	T			0	0	0	0	0
8		P	O	W	C	N	T			0	0	0	0	0
9														



First layer	Page	Item	Setting range	Initial value
Table of contents	1	CSLEVEL	0 ~ 128	00
		COM BIAS	0 ~ 1024	800
		ERR STBY	0 ~ Z	0
		L ERR RESET	0 clear	0
LCD	1	PWM CTRL	0 ~ 7	7
		PWM FREQ	0 ~ 4095	1289
		PWM DUTY	0 ~ 4095	0
		OSC FREQ	0 ~ 4095	77
		OSC DUTY	0 ~ 4095	70
		PMCG MODE	0 ~ 3	0
		PMCG SSC	0 ~ 3	0
		DAT DRV	0 ~ 7	0
		CLK DRV	0 ~ 7	0
	2	MODE	50Hz,60Hz,PC	60Hz
		QS SW	0 ~ 1	1
		QS D1	0 ~ 255	82(*3)
		QS D2	0 ~ 255	100(*3)
		QS D3	0 ~ 255	111(*3)
		QS D4	0 ~ 255	123(*3)
		QS D5	0 ~ 255	135(*3)
		QS D6	0 ~ 255	147(*3)
		QS D7	0 ~ 255	162(*3)
	3	OPC 0	0 ~ 85	00(*4)
		OPC 1	0 ~ 85	01(*4)
		OPC 2	0 ~ 85	03(*4)
		OPC 3	0 ~ 85	05(*4)
		OPC 4	0 ~ 85	06(*4)
		OPC 5	0 ~ 85	08(*4)
		OPC 6	0 ~ 85	11(*4)
		OPC 7	0 ~ 85	15(*4)
		OPC 8	0 ~ 85	18(*4)
	4	OPC 9	0 ~ 85	23(*4)
		OPC 10	0 ~ 85	27(*4)
		OPC 11	0 ~ 85	31(*4)
		OPC 12	0 ~ 85	36(*4)
		OPC 13	0 ~ 85	41(*4)
		OPC 14	0 ~ 85	46(*4)
		OPC 15	0 ~ 85	52(*4)
		OPC 16	0 ~ 85	57(*4)
	5	CS 00	0 ~ 2	0
		VH 247	0 ~ 1023	887(*4)
		VH 191	0 ~ 1023	755(*4)
		VH 159	0 ~ 1023	729(*4)
		VH 127	0 ~ 1023	710(*4)
		VH 95	0 ~ 1023	699(*4)
		VH 63	0 ~ 1023	681(*4)
		VH 31	0 ~ 1023	655(*4)
		VH 0	0 ~ 1023	527(*4)
	6	VL 0	0 ~ 1023	469(*4)
		VL 31	0 ~ 1023	341(*4)
		VL 63	0 ~ 1023	313(*4)
		VL 95	0 ~ 1023	298(*4)
		VL 127	0 ~ 1023	277(*4)
		VL 159	0 ~ 1023	255(*4)
		VL 181	0 ~ 1023	228(*4)
		VL 247	0 ~ 1023	090(*4)

(\*3) Initial value is different depending on mode setting (50 Hz or 60 Hz) and panel size. (PC has the same initial value as with 60 Hz.)

	37"		32"		26"	
	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
QS D1	84	84	82	82	84	84
QS D2	98	98	100	100	98	98
QS D3	109	109	111	111	109	109
QS D4	123	123	123	123	123	123
QS D5	135	135	135	135	135	135
QS D6	147	147	147	147	147	147
QS D7	160	160	162	162	160	160

(\*4) Initial value is different depending on panel size.

	37"	32"	26"
OPC 0	0	0	0
OPC 1	1	1	5
OPC 2	3	3	9
OPC 3	5	5	13
OPC 4	9	6	18
OPC 5	13	8	22
OPC 6	17	11	27
OPC 7	21	15	31
OPC 8	26	18	36
OPC 9	30	23	40
OPC 10	34	27	45
OPC 11	39	31	49
OPC 12	44	36	53
OPC 13	49	41	58
OPC 14	54	46	62
OPC 15	58	52	67
OPC 16	62	57	71

CS 0	37"	32"	26"
VH 247	912	887	916
VH 191	763	755	765
VH 159	738	729	742
VH 127	717	710	719
VH 95	703	699	704
VH 63	683	681	687
VH 31	659	655	666
VH 0	529	527	537
VL 247	65	90	64
VL 191	231	228	233
VL 159	258	255	260
VL 127	283	277	286
VL 95	300	298	304
VL 63	321	313	323
VL 31	352	341	352
VL 0	472	469	482

## Option Bytes table with service relevant option bits

Please do not change others!

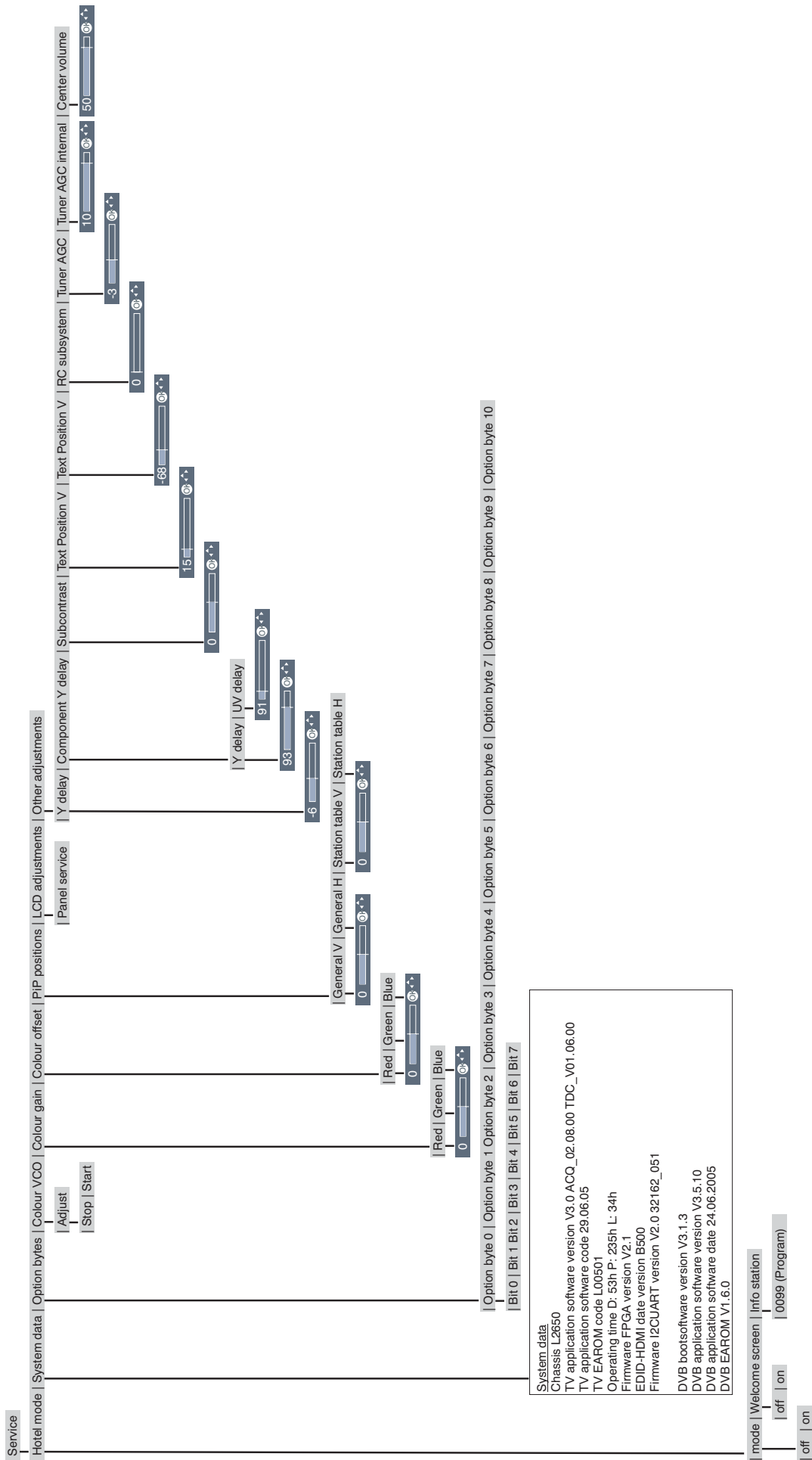
Alignment function	Bit No.	Meaning	“0”	“1”	Adjusted in the factory
<b>Byte 0</b>	<b>1</b>	EPG Program filter	On	Off	<b>0</b>
	<b>5</b>	Blue picture w/o signal	Yes	No	<b>0</b>
<b>Byte 1</b>	<b>1</b>	Effect lights for background	Off	On	<b>0</b>
	<b>2</b>	WSS detection in VCR mode	No	Yes	<b>1</b>
	<b>3</b>	AMD (Autom. movie detection)	On	Off	<b>0</b>
	<b>7</b>	At VGA mode sync failure	Change to TV mode	Keep VGA mode	<b>1</b>
<b>Byte 2</b>	<b>6</b>	Reaction time of remote commands	Fast	Slow	<b>0</b>
	<b>7</b>	WSS (Wide Screen Signalling Bits)	Evaluated	Not evaluated	<b>0</b>
<b>Byte 3</b>	<b>0</b>	Picture ratio (standard values)	Evaluated	Blocked	<b>0</b>
	<b>2</b>	Analogue EPG night update	Off	On	<b>1</b>
	<b>4</b>	Switching off after channel closes	Yes	No	<b>0</b>
	<b>5</b>	Factory mode	Off	On	<b>0</b>
	<b>2</b>	Power down cycle	Yes	No	<b>0</b>
<b>Byte 4</b>	<b>4</b>	AMD switch over	Fast	Langsam Slow	<b>1</b>
	<b>5</b>	Warm up mode	On	Off	<b>1</b>
<b>Byte 5</b>	<b>2</b>	PIP within EPG	Last program	Selected program “how”	<b>0</b>
	<b>3</b>	Sound AURO	SPDIF-out TV	Analogue sound from SCART 2	<b>0</b>

## Option Bytes table with service relevant option bits

Please do not change others!

Alignment function	Bit No.	Meaning	“0”	“1”	Adjusted in the factory
<b>Byte 6</b>	<b>6</b>	Indication of movie mode	No	Yes (with colour of Side Panels)	<b>0</b>
	<b>7</b>	VT subpages mode	Normal	Off	<b>0</b>
<b>Byte 7</b>	<b>4</b>	Assessing the 16:9 switching voltage	Yes	No	<b>0</b>
<b>Byte 8</b>	<b>0</b>	Factory mode	No	Yes	<b>0</b>
	<b>7</b>	Auto on (warm up)	Off	On	<b>0</b>
<b>Byte 9</b>	<b>0</b>	Chroma output at SCART 1	Pin 7	Pin 15	<b>0</b>
	<b>1</b>	Ext. receiver in VT mode	Autom. channel recognition	No autom. recognition	<b>0</b>
	<b>4</b>	DISEqC Telegram	Also for not used switch	Only for not used switch	<b>0</b>
	<b>7</b>	Rotation control via RC5	No	Yes	<b>1</b>
	<b>0</b>	Signal peaks (only LCD)	Yes	No	<b>0</b>
<b>Byte 10</b>	<b>1</b>	Program change in overview	Possible	Not possible	<b>0</b>
	<b>4</b>	Correction of MSP registers	No	Yes (Sound problem Luxembourg)	<b>0</b>

Service menu L2650 (LCD)



## Software loading

### 1 Update of the main software (operating software)

To update the software you need the „Programmer“ (Article number 87933.050) and the update program „Flasher“.

Please act according the following procedure:

- Switch off the TV set with the mains switch.
- Connect the Programmer with the L-Link cable to the service socket at the TV.
- Start the Flasher software and select „Step 2“ (see fig. 1).

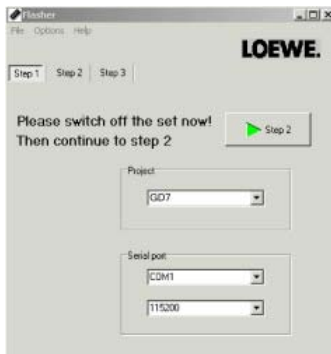


fig. 1

- Switch on the TV set with the mains switch now (TV does not switch on under this condition) - see fig. 2.



fig. 2

- Software automatically jumps to „Step 3“
- Now select „Auto program“ (see fig. 3) ...



fig. 3

...and select the new software version (see fig. 4).

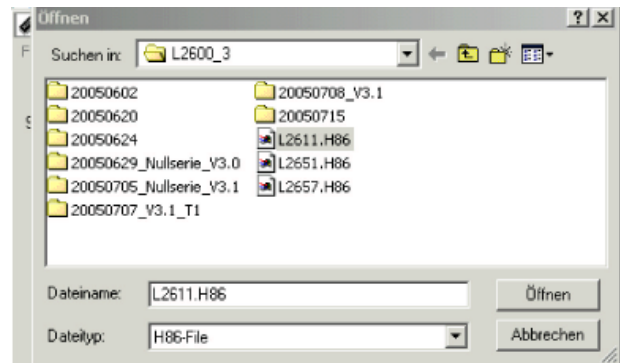


fig. 4

With selecting „Open“ the update process will start automatically (see fig. 5).



fig. 5

- With the message „Flash programmed“ the update is finished (fig. 6).

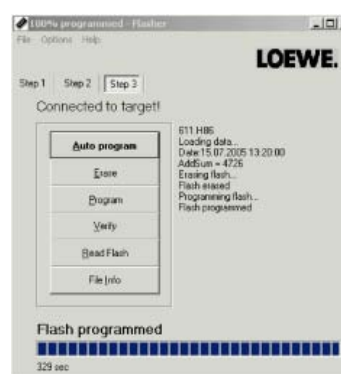


fig. 6

- Switch off the TV with the mains switch and disconnect the L-Link cable.

## 2. Update of the DVB Bootload- / Application software

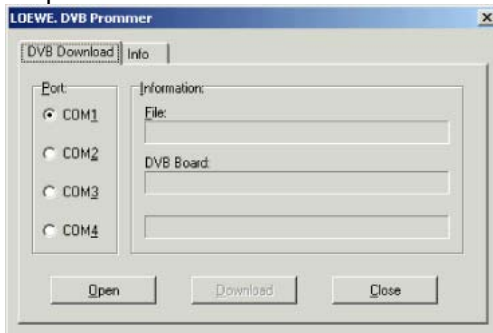
To update the software you need the „Programmer“ (Article number 87933.050) and the update program „Dvbpromer“.

Please act according to steps 1-6 shown in the following pictures:

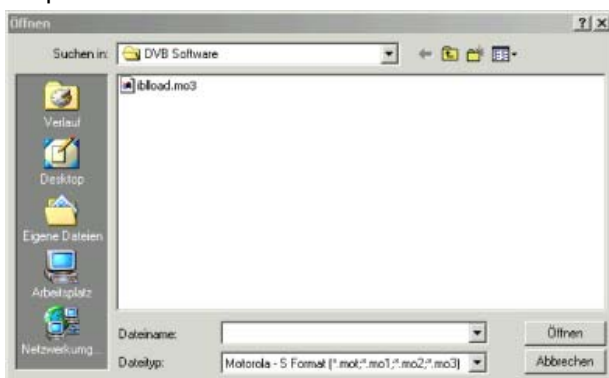
### Step 1



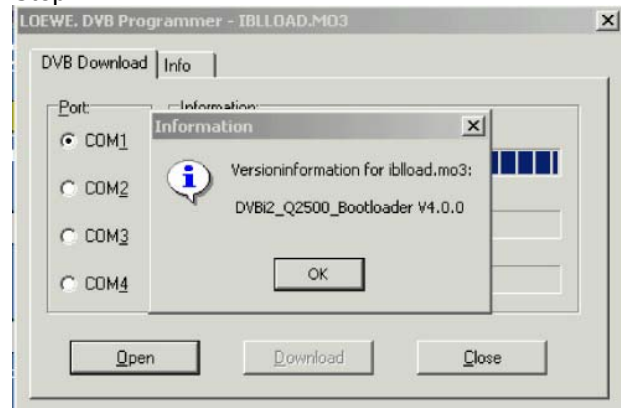
### Step 2



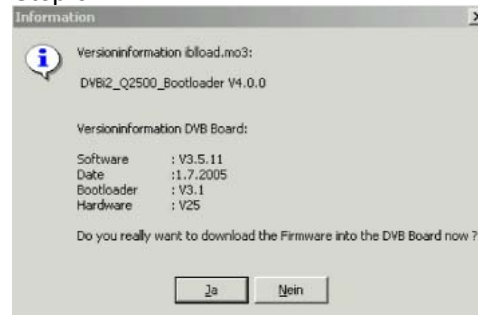
### Step 3



### Step 4



### Step 5



### Step 6



## Components Chart

L2650			Art. No.	65481. V00	65481. V10	65481. V20	65481. V30	65481. V40
			TV set type	AQUOS LC-32GD7E	AQUOS LC-32GD7F	AQUOS LC-32GD7K	AQUOS LC-32GD7R	AQUOS LC-32GD7 I
Components	Signal Board	89445	058	x	x		x	x
			059			x		
	Basic Board	89435	080	x	x	x	x	x
	Connector Board	89194	050	x	x	x	x	x
	IR Receiver/LED	89476	050	x	x	x	x	x
	Control Unit Sharp	89477	050	x	x	x	x	x
	LCD Panel Kit LC-32GS7L	89438	002	x	x	x	x	x
	Tuner/IF	89222	064	x	x	x	x	x
	DVB-S Frontend	89189	055	x	x		x	x
	Remote Control Sharp GD7	32534	x	x	x	x	x	x
Retrofit Kit	DVB-S	89361	055	x	x		x	x



## Technical specifications

### LC-32GD7E

#### General

Art. No.	65481
Dimensions with tablestand (mm)	795x638x307 (WxHxD)
Dimensions without tablestand (mm)	795x576x108 (WxHxD)
Picture format	16:9
Screen diagonal in cm	80
Picture resolution	1366x768
Contrast ratio	800:1
Viewing angle horizontal and vertical	170°
Weight with tablestand (kg)	approx. 20.5
Rated power IEC 62087 (watts)	85
Power consumption on standby (watts)	< 3
Ambient temperature (°C)	5-35
Relative humidity	20 ... 80% (no condensation)
Air pressure (hPa)	800 ... 1114 (0 ... 2000m above sea level))
Chassis	L 2650
Power supply	220 V - 240 V / 50-60 Hz
Tuner VHF/UHF/cable	
Hyperband 8 MHz	41 MHz to 860 MHz
Station memory	1680
TV standards	B/G, I, L, D/K, M, N
Colour standards	PAL SECAM, NTSC-V, PAL 60 Hz
Audio standards	mono/stereo/2-sound Nicam B/G, I, L, Virtual Dolby
Audio rated output (watts)	2 x 20 / 6 Ohm
Analogue teletext	TOP/FLOF Level 2.5
Teletext page memory	3500
Digital teletext (UK only)	MHEG-5

#### Connections

Jack 3.5 mm	Headphone 32-2000 Ohm
EXT 4 Mini-DIN	Video IN Y/C (S-VHS/Hi 8)
EXT 4 (yellow)	Video IN CVBS (VHS/8 mm)
Cinch (white/red)	Audio IN L/R
IEC socket 75 ohms (*5V/80mA)	Antenna/cable/DVB-T
*F socket 75 ohms 13/18V/350 mA	ANT-SAT
EXT 1	Video IN Y/C (S-VHS/Hi 8) CVBS (VHS/8 mm) RGB, YUV
	Video OUT CVBS Y/C (with SVHS AV link only)
	Audio IN L/R
	Audio OUT L/R
EXT 2	Video IN Y/C (S-VHS/Hi 8) CVBS (VHS/8 mm)
	Video OUT CVBS (VHS/8 mm) Y/C (S-VHS/Hi 8)
	Audio IN L/R
	Audio OUT L/R
Cinch	Audio IN max. 2Vrms Center
2 x Cinch	Audio IN L/R
2 x Cinch	Audio OUT L/R
EXT 3 (Cinch)	COMPONENT IN Cb/Pb signal
	COMPONENT IN Cr/Pr signal
	COMPONENT IN Y signal
Cinch	Digital Audio IN (SPDIF) digital sound
Cinch	Digital Audio OUT (SPDIF) digital sound
EXT 5	Digital video/audio IN type A 19-pole
	digital picture and sound
PC IN	VGA/XGA IN PC/STB picture signal
Mini DIN	Service/S-Link

\* Devices with digital satellite tuner

## Spare parts list

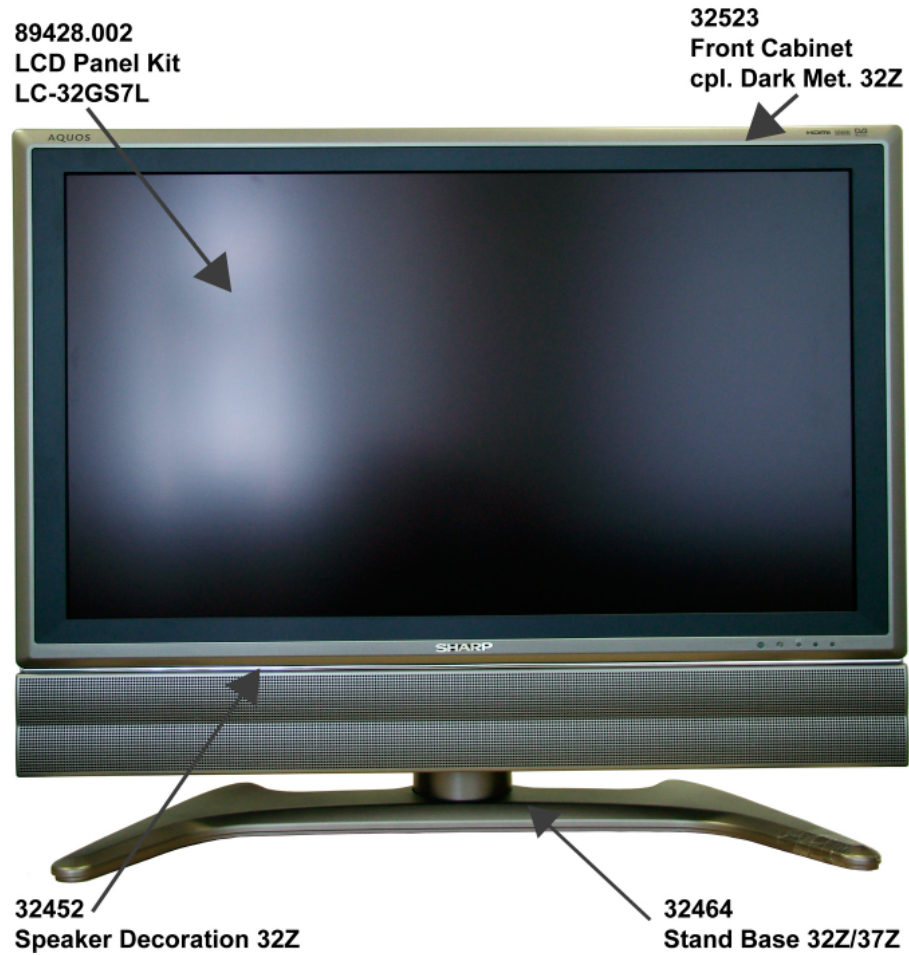
### AQUOS LC-32GD7E

Art.-No. 65481.V00-40

Item N°.	Description	List Part N°.	Var.
<b>UNITS</b>			
300	Operation complete Sharp GD7	L396-89477.050	
320	Socket plate complete Xelos SL	L396-89194.050	
351	IR receiver/LED complete Sharp GD7	L396-89476.050	
710	LCD-Panel-Kit LC-32GS7L Sharp.	L291-89438.002	
720	Basic Board complete L2650 26 / 32 SH	L396-89435.080	
721	Signal Board complete. L2650H NIC/DVB-T EU Sharp	L396-89445.058	V00
721	Signal Board complete. L2650H NIC/DVB-T EU Sharp	L396-89445.058	V10
721	Signal Board complete. L2650H NIC/DVB-T EU Sharp	L396-89445.058	V30
721	Signal Board complete. L2650H NIC/DVB-T EU Sharp	L396-89445.058	V40
721	Signal Board complete. L2650H NIC/DVB-T UK Sharp	L396-89445.059	V20
930	DVB-S Frontend complete. L2600/L2650	L396-89189.055	V00
930	DVB-S Frontend complete. L2600/L2650	L396-89189.055	V10
930	DVB-S Frontend complete. L2600/L2650	L396-89189.055	V30
930	DVB-S Frontend complete. L2600/L2650	L396-89189.055	V40
<b>OPERATING INSTRUCTIONS</b>			
500	Operation man. DE-GB-FR-IT-ES-NL Sharp GD7	L233-32414	V00
500	Operation man. DE-GB-FR-IT-ES-NL Sharp GD7	L233-32414	V10
500	Operation man. DE-GB-FR-IT-ES-NL Sharp GD7	L233-32414	V20
500	Operation man. DE-GB-FR-IT-ES-NL Sharp GD7	L233-32414	V40
500	Operation man. RU- Sharp GD7	L233-32414.030	V30
501	Operation man. PO-SE-FI-DK-NO Sharp GD7	L233-32414.010	V00
501	Operation man. PO-SE-FI-DK-NO Sharp GD7	L233-32414.010	V10
501	Operation man. PO-SE-FI-DK-NO Sharp GD7	L233-32414.010	V40
502	Operation man. PL-HU-CZ-SL Sharp GD7	L233-32414.020	V00
502	Operation man. PL-HU-CZ-SL Sharp GD7	L233-32414.020	V40
510	Guarantee card U.K. Sharp GD7	L224-32529	V20
510	Guarantee card Russ. Sharp GD7	L224-32530	V30
<b>SET SUPPLEMENT</b>			
650	Remote control Sharp GD7	L263-32534	
<b>PACKING MATERIAL</b>			
600	Packing Case GD7 32	L245-89509.002	
610	Cushion-Set GD7 32	L252-89508.050	
<b>CONNECTING CABLES</b>			
N101	Mains connection cable black 2500LG	L170-46655.001	V00
N101	Mains connection cable black 2500LG	L170-46655.001	V10
N101	Mains connection cable black 2500LG	L170-46655.001	V30
N101	Mains connection cable black 2500LG	L170-46655.001	V40
N101	Mains connection cable black 2500LG	L170-89378.001	V20
<b>CABINET MOUNTING</b>			
100	Speaker unit right 26Z/32Z/37Z Sharp	L776-32462	
101	Speaker unit left 26Z/32Z/37Z Sharp	L776-32461	
103	Ornamental molding loudspeaker 32Z Sharp	L700-32452	
104	Adhesion label Sharp 26Z/32Z	L715-32632	
302	Control unit complete grey Sharp GD7	L810-32527	
321	Holder AV socket AQUOS black	L602-89248.002	
619	Supporter 32Z Sharp	L541-32458	
620	Stand 32Z/37Z Sharp	L484-32464	
711	Holder Panel rightSharp GD7E	L602-89451.001	
712	Holder Panel left Sharp GD7E	L602-89451.011	
713	Holder VESA Sharp GD7E	L602-89452.001	
G104	Mask complete dark met. 32Z Sharp	L703-32523	

G110 Back cover black Sharp GD7 32Z  
G112 Cover black Common Interface GD7E  
G113 Back cover black 32/37Z Sharp

L775-89447.002  
L778-89449.002  
L778-89462.002



89449.002  
Covering black  
Common Interface  
GD7

89447.002  
Backcover black  
GD7 32Z



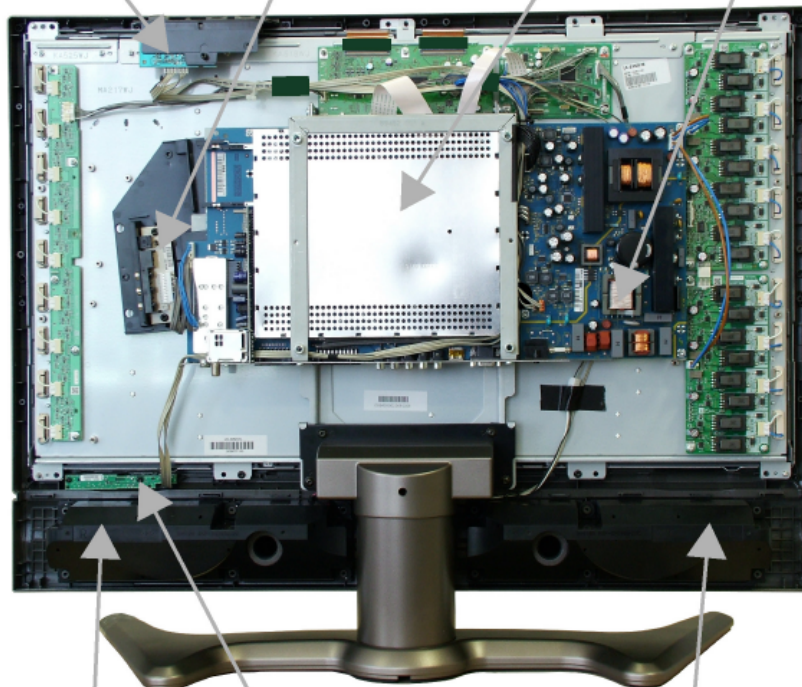
89462.002  
Covering Backcover  
black 32Z/37Z

89477.050  
Operation Device  
cpl. GD7

89194.050  
Socket P.C.B  
cpl.

89445.058 or 059  
Signal Board P.C.B

89435.080  
Basic Board



32462  
Speaker Unit Right  
26Z/32Z/37Z

89476.050  
IR receiver/LED  
P.C.B cpl.

32461  
Speaker Unit Left  
26Z/32Z/37Z

**Retrofit Kit Digital SAT****Art.-Nr. 89361.055**

<b>Item N°.</b>	<b>Description</b>	<b>List Part N°.</b>	<b>Var.</b>
<b>UNITS</b>			
10	DVB-S Frontend complete L2650 P.C.B	L396-89189.055	055
<b>OPERATING INSTRUCTIONS</b>			
41	Indicating sheet EBA DVB-S (P) Frontend L26XX	L240-32237	055
<b>SET SUPPLEMENT</b>			
21	Connecting cable SAT extension 350lg.	L169-89261.001	055
<b>PACKING MATERIAL</b>			
31	Protective packing 165x205 für MOS-Baugr.	L253-11845	055
48	Foam plastics ledge 215x215x30mm	L411-74721.010	055
49	Foam plastics ledge 215x215x30mm	L411-74721.010	055
50	Packing case	L245-84978.002	055

**DBVB-S Frontend****Art.-No. 89189.055**

<b>Item N°.</b>	<b>Description</b>	<b>List Part N°.</b>	<b>Var.</b>
<b>UNITS</b>			
U7001	DVB SAT tuner BS2S7VZ1302	L260-32104	055
<b>COILS, SPEAKERS</b>			
L7012	Choke DR-RA 22U K 1,2A	L298-28798.020	055
<b>INTEGRATED CIRCUITS</b>			
I7001	IC-VR 3V30 J 0A80 SO8 LD1117	L350-27212	055
I7002	IC-VR 3V30 G 2A50 HSOP8 L5973D	L350-31900	055
I7003	STV0299B TQFP64	L350-29049	055
I7004	LM 2903D SO08	L350-21674	055
<b>QUARTZES</b>			
X7001	Crystal Oscillator 4,000000 MHz HC49U	L385-17297	055
<b>CAPACITORS</b>			
C7050	1N K 630V 1206 X7R	L356-26774	055
<b>RESISTORS</b>			
R7044	Resistor 1R J 0207	L367-24709.020	055
<b>SMD PARTS</b>			
D7001	Diode 3,0A 40V SOD6 Schottky	L351-28529	055
D7002	Diode 1,0A 600V DO-214AC	L351-20547	055
D7003	Diode 3,0A 40V SOD6 Schottky	L351-28529	055
D7004	Diode DIOZD 6V2 G 0W3 SOT23 BZX84C	L351-26935	055
D7005	Diode 1,0A 600V DO-214AC	L351-20547	055
Q7001	Transistor 17NE03# TO252 17A0 30V NCH	L344-29257	055
Q7002	Transistor Digital SOT323 NPN 50V 70MA 47K+	L344-27270	055
Q7003	Transistor Digital SOT323 NPN 50V 70MA 47K+	L344-27270	055
Q7004	Transistor BC847BW SOT323	L344-27272	055
Q7005	Transistor BC847BW SOT323	L344-27272	055
Q7006	Transistor BC847BW SOT323	L344-27272	055
Q7007	Transistor BC847BW SOT323	L344-27272	055
Q7008	Transistor BC847BW SOT323	L344-27272	055

**Connector Board****Art.-No. 89194.050-051**

<b>Item N°.</b>	<b>Description</b>	<b>List Part N°.</b>	<b>Var.</b>
<b>SOCKETS</b>			
W1351	Combination jack 9311A	L323-32139	050
W1351	Combination jack 9311F	L323-32139.003	051
W1451	Headphone socket 3,5mm horiz.	L323-24591	
<b>SMD PARTS</b>			
D1391	Diode BAS316 SOD323	L351-27952	
D1392	Diode BAS316 SOD323	L351-27952	
D1491	Diode BAS316 SOD323	L351-27952	
D1492	Diode BAS316 SOD323	L351-27952	

**Tuner Art.-No. 89222.063-064**

<b>Item N°.</b>	<b>Description</b>	<b>List Part N°.</b>	<b>Var.</b>
<b>INTEGRATED CIRCUITS</b>			
I4400	ICMOS TUA6034 TSSOP-38 Mixer-Osc.	L350-31388	
I4500	TDA9890 LQFP48 IF-Processor	L350-32289	063
I4500	TDA9898 LQFP48 IF-Processor	L350-32290	064
<b>QUARTZES</b>			
X4420	Quartz 4,000000 MHz HC49U3 low profile	L385-27752	
<b>SMD PARTS</b>			
<b>Diodes</b>			
D4104	Cap. BB689 SCD80	L351-31392	
D4105	Cap. BB565C-02V SC79	L351-31399	
D4147	Cap. BB689 SCD80	L351-31392	
D4153	Cap. BB689 SCD80	L351-31392	
D4154	Cap. BB565C-02V SC79	L351-31399	
D4173	Cap. BB689 SCD80	L351-31392	
D4204	Cap. BB659C-02V SC79	L351-31387	
D4205	Cap. BB565C-02V SC79	L351-31399	
D4247	Cap. BB659C-02V SC79	L351-31387	
D4253	Cap. BB659C-02V SC79	L351-31387	
D4273	Cap. BB659C-02V SC79	L351-31387	
D4305	Cap. BB565C-02V SC79	L351-31399	
D4347	Cap. BB565C-02V SC79	L351-31399	
D4353	Cap. BB565C-02V SC79	L351-31399	
D4373	Cap. BB565C-02V SC79	L351-31399	
<b>Transistors</b>			
Q4100	MOSFET SOT343 NCH BF2030W	L344-31382	
Q4200	MOSFET SOT343 NCH BF2030W	L344-31382	
Q4300	DUALMOSFET SOT363 BG3130	L344-31383	063
Q4300	BF1202 SOT143B N-CH MOSFET	L344-32426	064
Q4571	BC847BT SC75 0A1 45V NPN	L344-31393	

**Basic Board****Art.-No. 89435.080**

<b>Item N°.</b>	<b>Description</b>	<b>List Part N°.</b>	<b>Var.</b>
<b>COILS, SPEAKERS</b>			
T161	Power transformer standby EF20-5,9	L490-30875	080
T342	Power transformer 2652.0008C L2650	L490-32512	080
<b>COMMON MECHANICAL PARTS</b>			
H101	Fuseholder spring for SI 5x20	L730-20061	080
H102	Fuseholder spring for SI 5x20	L730-20061	080
<b>INTEGRATED CIRCUITS</b>			
I141	ICE2A0565G P-DSO-16 OFF-LINE-CONTR.	L350-32092	080
I211	MC33262 SO-8 ONSEMI	L350-31489	080
I307	IC-VR 12V00 J 0A50 DPAK L78M12	L350-31891	080
I321	L6598 SO16N 600V 0A25 HVOLT.CONTR.	L350-32431	080
I351	IC-VR 2V5-24V F SOT23-3L TS2431	L350-31490	080
I361	IC-VR 2V5-24V F SOT23-3L TS2431	L350-31490	080
I511	L5994 TQFP32 power supply	L350-32099	080
I591	IC-VR 3V30 G 2A50 HSOP8 L5973D	L350-31900	080
I601	IC-VR 3V30 G 2A50 HSOP8 L5973D	L350-31900	080
I621	ICMOS ST755 SO8	L350-31267	080
I671	LM 2901 DT013TR SO-14 030	L350-27497	080
I821	MP7731 TSSOP20F audio AMP	L350-32249	080
I861	MP7731 TSSOP20F audio AMP	L350-32249	080
I941	MC33079 SO14	L350-28701	080
<b>SOCKETS</b>			
W101	Socket 2-pol. 1-row	L323-31223	080
W450	Contact ledge vert. 3-pol. nat.	L326-20054	080
W898	Contact ledge vert. 3-pol. gr.	L326-29784	080
<b>TRANSISTORS</b>			
10	20A 500V TO220FP POWMOS-NCH	L346-31643	080
10	POWMOS TO220FP NCH 550V 8A	L346-32175	080
Q224	20A 500V TO220FP POWMOS-NCH	L346-31643.Y27	080
Q334	POWMOS TO220FP NCH 550V 8A	L346-32175.Y27	080
Q336	POWMOS TO220FP NCH 550V 8A	L346-32175.Y27	080
<b>DIODES</b>			
10	Diode STTA806DI TO220	L352-27622	080
D191	Rectifier FBI5L1M1 900V/5A	L354-27910.Y22	080
D251	Diode STTA506F TO220	L352-27622.Y18	080
D411	Diode STPS20L45CF ISOWATT220AB 2x 10A	L352-20296.Y18	080
D413	Diode STPS20L45CF ISOWATT220AB 2x 10A	L352-20296.Y18	080
I151	Coupler SOP4 80V 50mA SMD	L353-32233	080
I201	Coupler SOP4 80V 50mA SMD	L353-32233	080
I311	Coupler SOP4 80V 50mA SMD	L353-32233	080
<b>FUSES</b>			
F101	3150mA T 250V 5x20 H	L380-29649	080
F181	1000mA F 250V 8x8	L380-31664.020	080
F418	4000mA F 250V 8x8	L380-31271.020	080
F451	4000mA F 250V 8x8	L380-31271.020	080
<b>CAPACITORS</b>			
C111	KOFOL 470N M 310VW	L359-29681	080
C113	330P M 400VW	L357-73804.Y01	080
C126	KOFOL 470N M 310VW	L359-29681	080
C128	KO-Y1 1N5 M 250V 10R0 X1/Y1	L357-29161	080
C131	KOFOL 470N M 310VW	L359-29681	080
C161	330P M 400VW	L357-73804.Y01	080
C191	470N M 275VW	L359-28292	080
C251	100P K 2000V	L359-28861	080

**Basic Board****Art.-No. 89435.080**

<b>Item N°.</b>	<b>Description</b>	<b>List Part N°.</b>	<b>Var.</b>
<b>CAPACITORS</b>			
C252	Electrolytic Capacitor 180U M 450V	L360-32240	080
C342	Capacitor 10N J 630V	L359-31179	080
<b>RESISTORS</b>			
10	Resistor 0R22 J 0411 0W75	L368-31799.010	080
10	NTC Resistor 2R5 M 7R5 Y-Type WIDNT	L370-31354	080
R191	NTC Resistor 2R5 M 7R5 Y-Type WIDNT	L370-31354.Y07	080
R232	Resistor 0R22 J 0411 0W75	L368-31799.Y03	080
R340	Resistor 10M J 0411	L367-19664.Y05	080
<b>SMD PARTS</b>			
<b>Diodes</b>			
D141	DIOZD 20V0 J 0W2 SOD323 BZT52	L351-31487	080
D142	BAS321 SOD323	L351-28873	080
D181	1,0A 800V DO214AC FAST-GP	L351-25542	080
D192	BAS316 SOD323	L351-27952	080
D200	DIOZD 20V0 J 0W2 SOD323 BZT52	L351-31487	080
D201	BAS316 SOD323	L351-27952	080
D203	BAS316 SOD323	L351-27952	080
D222	BAS316 SOD323	L351-27952	080
D241	0A5 20V SOD123 Schottky	L351-30905	080
D306	DIOZD 5V6 J 0W25 SOD323	L351-31054	080
D308	BAS316 SOD323	L351-27952	080
D315	BAS316 SOD323	L351-27952	080
D316	1,0A 200V DO214AC FAST-GP	L351-29831	080
D332	1,0A 800V DO214AC FAST-GP	L351-25542	080
D335	BAS316 SOD323	L351-27952	080
D337	BAS316 SOD323	L351-27952	080
D380	BAS316 SOD323	L351-27952	080
D401	3,0A 40V SOD6 Schottky	L351-28529	080
D491	DIOZD 3V0 J 0W25 SOD323	L351-31129	080
D492	DIOZD 5V6 J 0W25 SOD323	L351-31054	080
D535	3,0A 40V SOD6 Schottky	L351-28529	080
D536	0A5 20V SOD123 Schottky	L351-30905	080
D540	3,0A 40V SOD6 Schottky	L351-28529	080
D541	0A5 20V SOD123 Schottky	L351-30905	080
D551	BAS316 SOD323	L351-27952	080
D556	DIOZD 30V J 0W25 SOD323	L351-31055	080
D557	BAS316 SOD323	L351-27952	080
D596	3,0A 40V SOD6 Schottky	L351-28529	080
D606	3,0A 40V SOD6 Schottky	L351-28529	080
D634	3,0A 40V SOD6 Schottky	L351-28529	080
D662	DIOZD 5V6 J 0W25 SOD323	L351-31054	080
D663	BAS316 SOD323	L351-27952	080
D664	BAS316 SOD323	L351-27952	080
D673	BAS316 SOD323	L351-27952	080
D780	DIOZD 12V0 J 0W25 SOD323	L351-31128	080
D781	BAS316 SOD323	L351-27952	080
D783	BAS316 SOD323	L351-27952	080
D784	BAS316 SOD323	L351-27952	080
D786	BAS316 SOD323	L351-27952	080
D791	DIOZD 6V2 J 0W25 SOD323	L351-31062	080
D793	0A5 20V SOD123 Schottky	L351-30905	080
D794	BAS316 SOD323	L351-27952	080
D823	BAS316 SOD323	L351-27952	080
D824	DIOZD 6V2 J 0W25 SOD323	L351-31062	080



**Basic Board****Art.-No. 89435.080**

<b>Item N°.</b>	<b>Description</b>	<b>List Part N°.</b>	<b>Var.</b>
<b>SMD PARTS</b>			
<b>Diodes</b>			
D825	3,0A 40V SOD6 Schottky	L351-28529	080
D826	BAS316 SOD323	L351-27952	080
D827	DIOZD 6V2 J 0W25 SOD323	L351-31062	080
D828	3,0A 40V SOD6 Schottky	L351-28529	080
D863	BAS316 SOD323	L351-27952	080
D864	DIOZD 6V2 J 0W25 SOD323	L351-31062	080
D865	3,0A 40V SOD6 Schottky	L351-28529	080
D866	BAS316 SOD323	L351-27952	080
D867	DIOZD 6V2 J 0W25 SOD323	L351-31062	080
D868	3,0A 40V SOD6 Schottky	L351-28529	080
L431	3,0A 40V SOD6 Schottky	L351-28529	080
<b>Transistors</b>			
Q192	BC847BW SOT323	L344-27272	080
Q199	POWMOS DPAK NCH 400V 3A0 STD5NK40Z	L344-28594	080
Q207	BC857BW SOT323	L344-28404	080
Q301	BC847BW SOT323	L344-27272	080
Q304	BC847BW SOT323	L344-27272	080
Q306	BC857BW SOT323	L344-28404	080
Q370	BC847BW SOT323	L344-27272	080
Q371	BC847BW SOT323	L344-27272	080
Q536	BSO4822 SO-8 N-CH MOSFET	L344-31480	080
Q537	BSO4822 SO-8 N-CH MOSFET	L344-31480	080
Q541	POWMOS SO8 30V GA 2-NCH STS8DNF3LL	L344-30892	080
Q551	BC847BW SOT323	L344-27272	080
Q552	BC847BW SOT323	L344-27272	080
Q556	BC847BW SOT323	L344-27272	080
Q781	BC857BW SOT323	L344-28404	080
Q786	BC857BW SOT323	L344-28404	080
Q796	BC857BW SOT323	L344-28404	080
Q798	BC847BW SOT323	L344-27272	080
Q811	BC847BW SOT323	L344-27272	080
Q813	BC857BW SOT323	L344-28404	080
Q851	BC847BW SOT323	L344-27272	080
Q853	BC857BW SOT323	L344-28404	080

**Signal Board****Art.-No. 89445.058-059**

<b>Item N°.</b>	<b>Description</b>	<b>List Part N°.</b>
<b>UNITS</b>		
U2141	Tuner-ZF 04 H04 complete	396-89222.064
<b>INTEGRATED CIRCUITS</b>		
I2072	IC-VR 5V00 J 0A50 DPAK L78M05	L350-29006
I2111	IC-VR 5V00 J 0A50 DPAK L78M05	L350-29006
I2701	ICMOS SDA6000M2-B12 MQFP128	L350-30824
I2714	ICRES 2V70 SOT23-5 RESET S-80127	L350-30904
I2721	ICRES 2V70 SOT23-5 RESET S-80127	L350-30904
I2736	IC-VR 3V30 0A30 SOT223 TC1108	L350-29462
I2751	IC-VR 2V50 0A30 SOT223 TC1108	L350-29460
I2771	ICMOS 24256 SO-8 EEPROM 256K I2C	L350-31206
I2781	ICMOS 24256 SO-8 EEPROM 256K I2C	L350-31206
I2801	ICMOS 48LC4M# TSOP2 10ns SDRAM	L350-29137
I2811	ICMOS M29W320 TSOP48 90ns Flash Tray	L350-32490
I2841	ICMOS 74HCT4052D SO16	L350-29463

**Signal Board****Art.-No. 89445.058-059**

<b>Item N°.</b>	<b>Description</b>	<b>List Part N°.</b>
<b>INTEGRATED CIRCUITS</b>		
I3001	ICMOS MSP4411K MQFP80	L350-32014
I3006	IC-VR 8V00 J 0A10 SO8 L78L08	L350-26953
I3041	ICMOS 74 AC157 SO16	L350-28896
I3061	TS482IST SO8 mini headphone ampl.	L350-31975
I3121	MC33079 SO14	L350-28701
I3401	ICMOS ATMEGA16 TQFP44 Controller	L350-32162
I3601	ICMOS FRC9428-XX-B1 PMQFP144-4	L350-32157
I3651	IC-VR 3V30 G 2A50 HSOP8 L5973D	L350-31900
I3701	ICMOS VSP 9427B-XZ-C4 PMQFP144-1	L350-32156
I3704	ICMOS 74LVC1G04 SOT353 Inverter	L350-30912
I3801	ICMOS TEA6425 SO20L	L350-32020
I3901	HCF4053B SO16	L350-28690
I3931	ICMOS PCF8574 SSOP20	L350-28688
I3951	NJM2293M DMP16 Video-SWIT	L350-30736
I4001	ICMOS SII9993 TQFP-100 HDMI Receiver	L350-31455
I4031	ICMOS 74LVC1G04 SOT353 Inverter	L350-30912
I4042	IC-VR 3V30 G 0A15 SOT23-5 ZXCL3#	L350-30710
I4071	ICMOS 24LC02BT SO-8 2K I2C EEPROM	L350-31438
I4201	ICMOS DPS9455B-XZ-A2 MQFP144 Tray	L350-32318
I4219	IC-VR 1V80 0A05 SOT23-5L LD2982	L350-32248
I4222	IC-VR 3V30 0A30 SOT223 TC1108	L350-29462
I4226	ICMOS 74LVC1G04 SOT353 Inverter	L350-30912
I4233	ICMOS 74LVC1G04 SOT353 Inverter	L350-30912
I4281	IC-VR 3V30 G 0A15 SOT23-5 ZXCL3#	L350-30710
I4301	ICMOS 74HCT 86 SO14	L350-16065
I4311	ICMOS 74 AC157 SO16	L350-28896
I4331	IC-VR 3V30 G 0A15 SOT23-5 ZXCL3#	L350-30710
I4336	HCF4053B SO16	L350-28690
I4381	ICMOS 74 AC157 SO16	L350-28896
I4501	ICMOS EP1C3T144C8 TQFP144 Cyclone-FPGA	L350-32207
I4506	ICMOS EPCS1 SOIC-8 CONFIG. DEVICE	L350-31956
I4516	IC-VR 3V30 0A30 SOT223 TC1108	L350-29462
I4531	74 AC 04 SO14	L350-16393
I4541	IC-VR 3V30 G 2A50 HSOP8 L5973D	L350-31900
I4601	ICMOS DS90C385MTD TSSOP56	L350-31013
I4701	ICMOS HEF4093 SO14	L350-30726
I4711	LM 358 SMD	L350-21521
I4801	LT1675CGN SSOP16 RGB-MUX	L350-30906
I4851	ICMOS 24LC02BT SO-8 2K I2C EEPROM	L350-31438
I5001	ICMOS STI5518BQC PQFP208	L350-31959
I5011	IC-VR 2V50 0A50 SOT223 TC1262	L350-29461
I5022	IC-VR 3V30 G 2A50 HSOP8 L5973D	L350-31900
I5039	ICMOS TSH72CD SO-8 OP-AMP	L350-29866
I5101	ICMOS 48LC4M# TSOP2 10ns SDRAM	L350-29137
I5151	ICMOS MK3727D SOIC-8	L350-30948
I5171	IC-VR 3V30 J 0A80 SO8 LD1117	L350-27212
I5181	ICRES 2V60 SO8 RESET-IC TL7702	L350-27827
I5201	ICMOS 48LC4M# TSOP2 10ns SDRAM	L350-29137
I5251	ICMOS 74 HCT125 SMD	L350-15523
I5301	ICMOS M29W320 TSOP48 90ns Flash Tray	L350-32490
I5401	ICMOS TDA10046HT TQFP-64	L350-31012
I5431	IC-VR 1V80 F 0A50 SO-8 LP2989#	L350-29193
I5441	IC-VR 3V30 G 0A15 SOT23-5 ZXCL3#	L350-30710

**Signal Board****Art.-No. 89445.058-059**

<b>Item N°.</b>	<b>Description</b>	<b>List Part N°.</b>
<b>INTEGRATED CIRCUITS</b>		
I5461	LM317M TO252	L350-28700
I5471	LM 2903D SO08	L350-21674
I5551	MAX4546CSE SO16 RF/Video Switch	L350-28499
I5701	ICMOS STV0700 PQFP128 CI-CONT	L350-29865
I5721	ICMOS 74LVC14 SO14	L350-29881
I5771	ICMOS 74LVT245 SO20	L350-27028
I5781	ICMOS 74LVTH373 SO20	L350-29875
I5791	ICMOS 74LVTH373 SO20	L350-29875
<b>SOCKETS</b>		
10	Contact Ledge vert. 2-P nat.	L326-31940
W2001	Socket VGA 15-pol.	L323-32079
W2011	Contact Ledge SMD 5-pol. nat. 1R00 SR/SH vert.	L326-32424
W2021	Contact Ledge SMD 14-pol. nat. 1R0 SR vert.	L326-32095
W2071	Contact Ledge Connector 13-pol. 13JL-BT-L-H-C (JST)	L326-19543
W2072	Contact Ledge Connector 13-pol. 13JL-BT-L-H-C (JST)	L326-19543
W2081	Socket HDMI SMD horizontal without flange	L323-32291
W2101	Contact Ledge vert. 16-pol. nat. 2R0 2-row PHD	L326-32113
W2111	Contact Ledge vert. 4-pol. ge. 2R50 EH	L326-28671.Y29
W2131	Contact Ledge vert. 3-pol. nat. 2R50 EH	L326-20054.Y29
W2134	Contact Ledge vert. 6-pol. nat. 2R50 EH	L326-20762.Y29
W2136	Contact Ledge vert. 2-P nat. 2R50 EH	L326-31940.Y29
W2142	Socket row 4-pol.	L326-28942.001
W2143	Socket row 14-pol.	L326-28942.002
W2171	Cinch socket 6-fold horizontal coloured	L323-32077.002
W2181	Contact Ledge vert. 11-pol. nat.	L326-24643
W2201	SCART Socket horizontal	L323-32078
W2211	SCART Socket horizontal	L323-32078
W2221	Cinch Socket 4-fold horizontal 4 colour	L323-32076.001
W2231	Socket vert. 6-pol. blk.	L326-31059
W2281	Mini-DIN socket 8-pol.	L323-18812
W4501	Contact Ledge vert. 9-P nat.	L326-28719
W4601	Contact Ledge 50-pol. 0R5 vert. gold SMD	L326-32553
W4611	Contact Ledge 33-pol. 0R5 vert. gold SMD	L326-32554
<b>QUARTZES</b>		
X2738	Crystal Oscillator 6,000000 MHz HC49U CL=20pF	L385-29248
X3026	Crystal Oscillator 18,432000 MHz HC49U	L385-25502
X3408	Quartz 11,059200 MHz HC49U3H low profile	L385-16812
X3607	Crystal Oscillator 20,250000 MHz HC49U	L385-26686
X3792	Crystal Oscillator 20,250000 MHz HC49U	L385-26686
X4214	Crystal Oscillator 20,250000 MHz HC49U	L385-26686
X4534	Crystal Oscillator 29,491200 MHz HC49U3	L385-31414
X5154	Crystal Oscillator 13,500000 MHz HC49U	L385-18287
X5414	Crystal Oscillator 16,000000 MHz HC49U	L385-28900
<b>RESISTORS</b>		
R2041	NTC Resistor 10K 0603 100mW WIDNT	L370-31696
R4021	Resistor 4x22R J 4x0603 Res. Array	L374-30936
R4022	Resistor 4x22R J 4x0603 Res. Array	L374-30936
R4023	Resistor 4x22R J 4x0603 Res. Array	L374-30936
R4024	Resistor 4x22R J 4x0603 Res. Array	L374-30936
R4026	Resistor 4x22R J 4x0603 Res. Array	L374-30936
R4027	Resistor 4x22R J 4x0603 Res. Array	L374-30936
R4241	Resistor 4x22R J 4x0603 Res. Array	L374-30936
R4242	Resistor 4x22R J 4x0603 Res. Array	L374-30936

**Signal Board****Art.-No. 89445.058-059**

<b>Item N°.</b>	<b>Description</b>	<b>List Part N°.</b>
<b>RESISTORS</b>		
R4243	4x22R J 4x0603 Res. Array	L374-30936
R4244	4x22R J 4x0603 Res. Array	L374-30936
R4246	4x22R J 4x0603 Res. Array	L374-30936
R4247	4x22R J 4x0603 Res. Array	L374-30936
R4511	4x22R J 4x0603 Res. Array	L374-30936
R4512	4x22R J 4x0603 Res. Array	L374-30936
R4513	4x22R J 4x0603 Res. Array	L374-30936
R4514	4x22R J 4x0603 Res. Array	L374-30936
R4516	4x22R J 4x0603 Res. Array	L374-30936
R4517	4x22R J 4x0603 Res. Array	L374-30936
<b>SMD PARTS</b>		
<b>Diodes</b>		
D2001	BAS316 SOD323	L351-27952
D2071	1,0A 600V DO-214AC	L351-20547
D2072	1,0A 600V DO-214AC	L351-20547
D2097	BAS316 SOD323	L351-27952
D2102	0A1 30V SOD323 Schottky	L351-31461
D2108	1,0A 600V DO-214AC	L351-20547
D2109	1,0A 600V DO-214AC	L351-20547
D2286	DIOZD 5V6 J 0W5 SOD-80 ZMM5.6	L351-16758
D2287	BAS316 SOD323	L351-27952
D2709	BAS316 SOD323	L351-27952
D2732	0A5 20V SOD123 Schottky	L351-30905
D2762	DIOZD 6V2 J 0W25 SOD323	L351-31062
D2771	DIOZD 5V6 J 0W25 SOD323	L351-31054
D2831	BAS316 SOD323	L351-27952
D2838	BAS316 SOD323	L351-27952
D2847	BAS316 SOD323	L351-27952
D2849	BAS316 SOD323	L351-27952
D2857	BAS316 SOD323	L351-27952
D2904	3,0A 40V SOD6 Schottky	L351-28529
D3113	DIOZD 12V0 J 0W25 SOD323	L351-31128
D3122	BAS316 SOD323	L351-27952
D3133	DIOZD 12V0 J 0W25 SOD323	L351-31128
D3656	3,0A 40V SOD6 Schottky	L351-28529
D3828	DIOZD 5V6 J 0W5 SOD-80 ZMM5.6	L351-16758
D3874	DIOZD 5V6 J 0W5 SOD-80 ZMM5.6	L351-16758
D3971	BAS316 SOD323	L351-27952
D3972	BAS316 SOD323	L351-27952
D4083	BAS316 SOD323	L351-27952
D4093	BAS316 SOD323	L351-27952
D4096	BAS316 SOD323	L351-27952
D4543	3,0A 40V SOD6 Schottky	L351-28529
D4712	BAS316 SOD323	L351-27952
D4801	0A5 20V SOD123 Schottky	L351-30905
D4802	DIOZD 5V6 J 0W25 SOD323	L351-31054
D4806	0A5 20V SOD123 Schottky	L351-30905
D4807	DIOZD 5V6 J 0W25 SOD323	L351-31054
D4851	BAS316 SOD323	L351-27952
D5024	3,0A 40V SOD6 Schottky	L351-28529
D5078	0A1 30V SOD323 Schottky	L351-31461
D5256	BAS316 SOD323	L351-27952
D5262	BAS316 SOD323	L351-27952
D5271	BAS316 SOD323	L351-27952

**Signal Board****Art.-No. 89445.058-059**

<b>Item N°.</b>	<b>Description</b>	<b>List Part N°.</b>
<b>SMD PARTS</b>		
<b>Diodes</b>		
D5281	BAS316 SOD323	L351-27952
D5467	1,0A 600V DO-214AC	L351-20547
<b>Transistors</b>		
Q2081	BF799LK	L344-17798
Q2084	BC847BW SOT323	L344-27272
Q2086	BC847BW SOT323	L344-27272
Q2088	BC857BW SOT323	L344-28404
Q2091	BF799LK	L344-17798
Q2287	BC857BW SOT323	L344-28404
Q2292	BC857BW SOT323	L344-28404
Q2294	BC857BW SOT323	L344-28404
Q2297	BC857BW SOT323	L344-28404
Q2298	BC857BW SOT323	L344-28404
Q2702	BC847BW SOT323	L344-27272
Q2707	BC847BW SOT323	L344-27272
Q2733	BC847BW SOT323	L344-27272
Q2762	SN7002 SOT23 0A19 60V NCH	L344-29134
Q2764	SN7002 SOT23 0A19 60V NCH	L344-29134
Q2766	SN7002 SOT23 0A19 60V NCH	L344-29134
Q2768	SN7002 SOT23 0A19 60V NCH	L344-29134
Q2788	BC847BW SOT323	L344-27272
Q2817	BC847BW SOT323	L344-27272
Q2821	BC857BW SOT323	L344-28404
Q2826	SN7002 SOT23 0A19 60V NCH	L344-29134
Q2831	BC857BW SOT323	L344-28404
Q2838	BC847BW SOT323	L344-27272
Q2847	BC847BW SOT323	L344-27272
Q2849	BC847BW SOT323	L344-27272
Q2857	BC847BW SOT323	L344-27272
Q2859	BC847BW SOT323	L344-27272
Q2863	BC847BW SOT323	L344-27272
Q2867	BC847BW SOT323	L344-27272
Q2871	BC847BW SOT323	L344-27272
Q2883	BC847BW SOT323	L344-27272
Q2887	BC847BW SOT323	L344-27272
Q2891	BC847BW SOT323	L344-27272
Q2904	BC847BW SOT323	L344-27272
Q2978	BC847BW SOT323	L344-27272
Q2982	BC847BW SOT323	L344-27272
Q3028	BC857BW SOT323	L344-28404
Q3051	BC857BW SOT323	L344-28404
Q3057	BC847BW SOT323	L344-27272
Q3066	BC857BW SOT323	L344-28404
Q3068	BC857BW SOT323	L344-28404
Q3071	BC857BW SOT323	L344-28404
Q3078	BC847BW SOT323	L344-27272
Q3083	BC847BW SOT323	L344-27272
Q3093	BC847BW SOT323	L344-27272
Q3117	BC847BW SOT323	L344-27272
Q3118	BC847BW SOT323	L344-27272
Q3137	BC847BW SOT323	L344-27272
Q3138	BC847BW SOT323	L344-27272
<b>Transistors</b>		
Q3416	SN7002 SOT23 0A19 60V NCH	L344-29134
Q3426	SN7002 SOT23 0A19 60V NCH	L344-29134

**Signal Board****Art.-No. 89445.058-059**

<b>Item N°.</b>	<b>Description</b>	<b>List Part N°.</b>
<b>SMD PARTS</b>		
<b>Transistors</b>		
Q3441	BC847BW SOT323	L344-27272
Q3443	BC847BW SOT323	L344-27272
Q3446	BC847BW SOT323	L344-27272
Q3448	BC847BW SOT323	L344-27272
Q3451	BC847BW SOT323	L344-27272
Q3456	BC847BW SOT323	L344-27272
Q3709	BC847BW SOT323	L344-27272
Q3724	BC847BW SOT323	L344-27272
Q3751	BC847BW SOT323	L344-27272
Q3811	BC857BW SOT323	L344-28404
Q3816	BC847BW SOT323	L344-27272
Q3818	BC857BW SOT323	L344-28404
Q3828	BC847BW SOT323	L344-27272
Q3852	BC847BW SOT323	L344-27272
Q3862	BC857BW SOT323	L344-28404
Q3872	BC847BW SOT323	L344-27272
Q3904	BC847BW SOT323	L344-27272
Q3906	BC857BW SOT323	L344-28404
Q3923	BC847BW SOT323	L344-27272
Q3927	BC847BW SOT323	L344-27272
Q3952	BC847BW SOT323	L344-27272
Q3962	BC847BW SOT323	L344-27272
Q3971	BC807-25 SOT23	L344-16064
Q3973	BC857BW SOT323	L344-28404
Q4017	BC847BW SOT323	L344-27272
Q4077	BC847BW SOT323	L344-27272
Q4083	BF799LK	L344-17798
Q4093	BF799LK	L344-17798
Q4103	BC847BW SOT323	L344-27272
Q4107	BC847BW SOT323	L344-27272
Q4113	BC847BW SOT323	L344-27272
Q4254	BC847BW SOT323	L344-27272
Q4322	BC847BW SOT323	L344-27272
Q4327	BC847BW SOT323	L344-27272
Q4336	BC847BW SOT323	L344-27272
Q5016	BC847BW SOT323	L344-27272
Q5256	BC857BW SOT323	L344-28404
Q5262	BC857BW SOT323	L344-28404
Q5267	BC857BW SOT323	L344-28404
Q5271	BSV52 SOT23	L344-16207
Q5281	BSV52 SOT23	L344-16207
Q5288	BC857BW SOT323	L344-28404
Q5291	BC847BW SOT323	L344-27272
Q5467	SI2302ADS MOSF.N-channel 1,25W SOT23	L344-28503
Q5471	BC847BW SOT323	L344-27272
Q5479	BC847BW SOT323	L344-27272
Q5481	BC847BW SOT323	L344-27272

**IR Receiver/LED****Art.-No. 89476.050**

<b>Item N°.</b>	<b>Description</b>	<b>List Part N°.</b>	<b>Var.</b>
<b>SOCKETS</b>			
W6001	Contact Ledge vert. 6-pol. nat.	L326-20762	050
<b>DIODES</b>			
D6007	Coupler LED bicolor SMD T677 red/green	L353-31002	050
I6002	Coupler IR receiver GP1UW261RK0F Sharp	L353-32616	050
<b>SMD PARTS</b>			
D6001	DIOZD 6V2 J 0W25 SOD323	L351-31062	050
D6002	Diode BAS316 SOD323	L351-27952	050
D6003	Diode BAS316 SOD323	L351-27952	050
Q6010	Transistor BC847BW SOT323	L344-27272	050
Q6011	Transistor BC847BW SOT323	L344-27272	050
Q6013	Transistor BC857BW SOT323	L344-28404	050
Q6014	Transistor BC857BW SOT323	L344-28404	050

**Control Unit Sharp GD7****Art.-No. 89477.050**

<b>Item N°.</b>	<b>Description</b>	<b>List Part N°.</b>	<b>Var.</b>
<b>SOCKETS</b>			
W6002	Contact Ledge hor. 4-pol. nat.	L326-19787	050
W6003	Contact Ledge 3-pol. nat.	L326-26649	050
<b>SWITCHES</b>			
W6014	Switch 2-pol. 0A2 30VDC	L467-32484	050
W6018	Switch horiz. 6x6 DTSA	L467-32483	050
W6019	Switch horiz. 6x6 DTSA	L467-32483	050
W6020	Switch horiz. 6x6 DTSA	L467-32483	050
W6021	Switch horiz. 6x6 DTSA	L467-32483	050
W6022	Switch horiz. 6x6 DTSA	L467-32483	050
<b>SMD PARTS</b>			
D6001	Diode BAS316 SOD323	L351-27952	050
D6002	Diode DIOZD 6V2 J 0W25 SOD323	L351-31062	050
Q6002	Transistor BC847BW SOT323	L344-27272	050

PWB ASSY	REF NO.	PART NUMBER	DESCRIPTION	NOTE
		DUNTKD025VJ04	LCD Control Unit	
		DUNTKD165VJ05	Micro Processor Unit	LC32GA7L, LC32GS7L from 2142 sets
		DUNTKD165VJ02	Micro Processor Unit	LC32GS7L 1 to 2141 sets
		RUNTKA144WJZZ	Inverter A Unit	
		RUNTKA145WJZZ	Inverter B Unit	
		RUNTKA146WJZZ	Inverter GND Unit	
<b>LCDCONTROL UNIT</b>				
<b>IC</b>				
	IC4101	VHiBD8133FV-1Y	Bd8133Fv-E2	
	IC4102	VHiNJM4580V-1Y	Njm4580V	
	IC4104	RH-IXB332WJZZY	I.C.	
	IC4107	VHiLP2951CM-1Y	Lp2951Cmx	
	IC4501	RH-IXB410WJZZY	I.C.	
	IC4502	RH-IXB326WJZZQ	Ixb326	
	IC4503	RH-IXB029WJZZQ	Mt48Lc2M32B2P6	
	IC4601	VHiDS90C386-1Y	Ds90Cf386Mtdx	
	IC4603	VHiT7WH123U-1Y	Tc7Wh123Fu	
	IC4901	RH-IXB420WJZZY	I.C.	
	IC4902	VHiLM8261+-1Y	Lm8261M5X	
	IC4903	VHiLM8261+-1Y	Lm8261M5X	
	IC7702	VHiPQ025EZ5-1Y	Pq025Ez5Mzp	
	IC7704	VHiPQ033EZ1-1Y	Pq033Ez01Zp	
<b>TRANSISTOR</b>				
	Q4101	VS2SD1664Q+-1Y	2SD1664Q	
	Q4105	VSTP0610T+-1Y	TP0610T	
	Q4106	VS2SC3928AR-1Y	2SC3928AR	
	Q4108	VS2SK1826+-1Y	2SK1826	
	Q4109	VS2SK1826+-1Y	2SK1826	
	Q4112	VS2SB1132Q/-1Y	2SB1132Q	
	Q4113	VS2SK1826+-1Y	2SK1826	
	Q4114	VS2SK1826+-1Y	2SK1826	
	Q4115	VSDTC144EE/-1Y	DTC144EE	
	Q4116	VSDTC144EE/-1Y	DTC144EE	
	Q4901	VS2SD1664Q+-1Y	2SD1664Q	
	Q4902	VS2SB1132Q/-1Y	2SB1132Q	
	Q4903	VS2SD1664Q+-1Y	2SD1664Q	
	Q4904	VS2SB1132Q/-1Y	2SB1132Q	
	Q4905	VS2SD1664Q+-1Y	2SD1664Q	
	Q4906	VS2SB1132Q/-1Y	2SB1132Q	
	Q4907	VS2SD1664Q+-1Y	2SD1664Q	
	Q4908	VS2SB1132Q/-1Y	2SB1132Q	
	Q4909	VSQS6M4++++-1Y	QS6M4	
	Q4910	VSQS6M4++++-1Y	QS6M4	
	Q4911	VSQS6M4++++-1Y	QS6M4	
	Q4912	VSQS6M4++++-1Y	QS6M4	
	Q4913	VSQS6M4++++-1Y	QS6M4	
	Q4914	VSQS6M4++++-1Y	QS6M4	
	Q4915	VSQS6M4++++-1Y	QS6M4	
	Q4916	VSQS6M4++++-1Y	QS6M4	
	Q4917	VSQS6M4++++-1Y	QS6M4	
	Q4918	VSQS6M4++++-1Y	QS6M4	
	Q4919	VSDTC144EE/-1Y	DTC144EE	
<b>DIODE</b>				
	D4101	VHDLi114++++-1Y	Diode	
	D4102	VHDLi114++++-1Y	Diode	
	D4103	VHDLi124++++-1Y	Diode	



PWB ASSY	REF NO.	PART NUMBER	DESCRIPTION	NOTE
	D7701	VHDHSU119//1Y	Diode	
	D7705	VHDHSU119//1Y	Diode	
PACKAGED CIRCUITS				
	X4501	RCRUAA048WJZZY	Crystal	
FILTER AND COIL				
	FL4651	RFILNA002WJZZY	Filter	
	FL4652	RFILNA002WJZZY	Filter	
	FL4653	RFILNA002WJZZY	Filter	
	FL4654	RFILNA002WJZZY	Filter	
	L4101	RCiLPA296WJZZY	Coil	
	L4102	RCiLP0343TAZZY	Coil	
	L4103	RCiLP0343TAZZY	Coil	
	L4104	RCiLP0271TAZZY	Coil	
	L4105	VPD9M4R7J1R4NY	Peaking 4.7#H 5%	
	L4106	RCiLP0343TAZZY	Coil	
	L4107	RCiLP0343TAZZY	Coil	
	L4110	VPD9M4R7J1R4NY	Peaking 4.7#H 5%	
CAPACITOR				
	C4101	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4102	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4103	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4104	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4105	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4106	RC-KZA107WJZZY	Capacitor	
	C4107	VCKYCY1HB102KY	1000p 50V Ceramic	
	C4108	RC-KZA107WJZZY	Capacitor	
	C4109	VCCCCY1HH680JY	68p 50V Ceramic	
	C4110	RC-KZA107WJZZY	Capacitor	
	C4111	RC-KZA110WJZZY	Capacitor	
	C4112	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4113	RC-KZA110WJZZY	Capacitor	
	C4114	RC-KZA114WJZZY	Capacitor	
	C4115	RC-KZA114WJZZY	Capacitor	
	C4116	RC-KZA114WJZZY	Capacitor	
	C4117	RC-KZA114WJZZY	Capacitor	
	C4118	RC-KZA114WJZZY	Capacitor	
	C4119	RC-KZA114WJZZY	Capacitor	
	C4120	RC-KZA114WJZZY	Capacitor	
	C4121	RC-KZA114WJZZY	Capacitor	
	C4122	RC-KZA114WJZZY	Capacitor	
	C4123	RC-KZA114WJZZY	Capacitor	
	C4124	RC-KZA114WJZZY	Capacitor	
	C4125	RC-KZA114WJZZY	Capacitor	
	C4126	RC-KZA114WJZZY	Capacitor	
	C4127	RC-KZA114WJZZY	Capacitor	
	C4128	RC-KZA114WJZZY	Capacitor	
	C4129	RC-KZA114WJZZY	Capacitor	
	C4130	RC-KZA114WJZZY	Capacitor	
	C4131	RC-KZA114WJZZY	Capacitor	
	C4141	VCCCCY1HH101JY	100p 50V Ceramic	
	C4142	VCKYCY1HB222KY	2200p 50V Ceramic	
	C4143	VCCCCY1HH101JY	100p 50V Ceramic	
	C4144	VCKYCY1HB222KY	2200p 50V Ceramic	
	C4145	VCCCCY1HH100DY	10p 50V Ceramic	
	C4146	VCCCCY1HH101JY	100p 50V Ceramic	
	C4147	VCCCCY1HH681JY	680p 50V Ceramic	
	C4148	VCCCCY1HH101JY	100p 50V Ceramic	
	C4149	VCKYCY1HB222KY	2200p 50V Ceramic	
	C4150	VCKYCY1CF224ZY	0.22 16V Ceramic	
	C4151	RC-KZ0053TAZZY	Capacitor	
	C4152	VCEASY1CN477MY	470 16V Electrolytic	
	C4153	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4154	VCEASY1EN227MY	220 25V Electrolytic	
	C4155	RC-KZA110WJZZY	Capacitor	
	C4156	VCKYCY1HB102KY	1000p 50V Ceramic	
	C4157	VCKYCY1HB102KY	1000p 50V Ceramic	
	C4158	VCKYCY1CF474ZY	0.47 16V Ceramic	
	C4159	RC-KZ0053TAZZY	Capacitor	
	C4160	VCEASY1HN106MY	10 50V Electrolytic	
	C4161	RC-KZA047WJZZY	Capacitor	
	C4162	RC-KZ0070TAZZY	Capacitor	

PWB ASSY	REF NO.	PART NUMBER	DESCRIPTION	NOTE
	C4163	RC-KZA047WJZZY	Capacitor	
	C4164	VCEASY1EN227MY	220 25V Electrolytic	
	C4165	RC-KZA110WJZZY	Capacitor	
	C4166	RC-KZA047WJZZY	Capacitor	
	C4168	RC-KZA083WJZZY	Capacitor	
	C4176	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4192	VCKYCY1HB152KY	1500p 50V Ceramic	
	C4195	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4197	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4198	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4199	RC-KZA047WJZZY	Capacitor	
	C4501	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4502	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4503	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4504	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4505	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4506	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4507	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4508	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4509	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4510	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4511	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4512	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4513	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4514	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4515	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4516	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4517	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4518	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4519	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4520	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4521	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4522	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4523	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4524	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4525	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4526	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4527	RC-KZ0070TAZZY	Capacitor	
	C4528	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4529	RC-KZ0070TAZZY	Capacitor	
	C4530	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4531	RC-KZ0070TAZZY	Capacitor	
	C4532	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4533	RC-KZ0070TAZZY	Capacitor	
	C4534	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4535	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4537	VCKYCY1HB102KY	1000p 50V Ceramic	
	C4538	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4602	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4603	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4604	VCKYCY1HB102KY	1000p 50V Ceramic	
	C4605	VCKYCY1HB102KY	1000p 50V Ceramic	
	C4606	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4607	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4608	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4609	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4610	RC-KZ0070TAZZY	Capacitor	
	C4622	VCKYCY1HB102KY	1000p 50V Ceramic	
	C4623	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4651	VCAAPF0JJ107MY	100 6.3V Electrolytic	
	C4652	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4653	VCAAPC1DJ226MY	22 20V Electrolytic	
	C4654	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4655	VCAAPF0JJ107MY	100 6.3V Electrolytic	
	C4656	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4657	VCAAPC1DJ226MY	22 20V Electrolytic	
	C4658	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4659	RC-KZ0070TAZZY	Capacitor	
	C4660	RC-KZA110WJZZY	Capacitor	
	C4661	RC-KZ0070TAZZY	Capacitor	
	C4662	RC-KZA110WJZZY	Capacitor	

PWB ASSY	REF NO.	PART NUMBER	DESCRIPTION	NOTE
	C4901	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4902	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4903	VCCCCY1HH680JY	68p 50V Ceramic	
	C4904	RC-KZA106WJZZY	Capacitor	
	C4905	RC-KZA109WJZZY	10 16V Ceramic	
	C4906	RC-KZA109WJZZY	10 16V Ceramic	
	C4907	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4908	VCCCCY1HH680JY	68p 50V Ceramic	
	C4909	RC-KZA106WJZZY	Capacitor	
	C4910	RC-KZA109WJZZY	10 16V Ceramic	
	C4911	RC-KZA109WJZZY	10 16V Ceramic	
	C4912	RC-KZA106WJZZY	Capacitor	
	C4913	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4914	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4915	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4916	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4917	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4918	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4919	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4920	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4921	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4922	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4923	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4924	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4925	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4926	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4927	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4928	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4929	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4930	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4931	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4932	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4933	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4934	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4935	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4936	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4937	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4938	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4939	VCKYCY1HB103KY	0.01 50V Ceramic	
	C4940	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4941	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C4942	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C7702	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C7703	VCEASY0JN476MY	47 6.3V Electrolytic	
	C7704	VCKYCY1HB103KY	0.01 50V Ceramic	
	C7707	VCEASY1CN226MY	22 16V Electrolytic	
	C7713	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C7723	VCEASY0JN476MY	47 6.3V Electrolytic	
	C7725	VCKYCY1EF104ZY	0.1 25V Ceramic	
RESISTOR				
	R4101	VRS-CY1JF102FY	1.0k 1/16W 1% Metal Oxide	
	R4102	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4103	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4104	VRS-CY1JF103JY	10k 1/16W 5% Metal Oxide	
	R4105	VRS-TW2ED331JY	330 1/4W 5% Metal Oxide	
	R4106	VRS-CY1JF103JY	10k 1/16W 5% Metal Oxide	
	R4107	VRS-CY1JF103JY	10k 1/16W 5% Metal Oxide	
	R4108	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4109	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4110	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4111	VRS-CY1JF103JY	10k 1/16W 5% Metal Oxide	
	R4112	VRS-CY1JF153FY	15k 1/16W 1% Metal Oxide	
	R4113	VRS-CY1JF330JY	33 1/16W 5% Metal Oxide	
	R4114	VRS-CY1JF000JY	0 1/16W 5% Metal Oxide	
	R4116	VRS-CY1JF103JY	10k 1/16W 5% Metal Oxide	
	R4118	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4119	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4120	VRS-CY1JF103JY	10k 1/16W 5% Metal Oxide	
	R4121	VRS-CY1JF332FY	3.3k 1/16W 1% Metal Oxide	
	R4122	VRS-CY1JF682FY	6.8k 1/16W 1% Metal Oxide	
	R4123	VRS-CY1JF332FY	3.3k 1/16W 1% Metal Oxide	

PWB ASSY	REF NO.	PART NUMBER	DESCRIPTION	NOTE
	R4124	VRS-CY1JF392FY	3.9k 1/16W 1% Metal Oxide	
	R4125	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4126	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4127	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4128	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4129	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4130	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4131	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4132	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4133	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4134	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4135	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4136	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4137	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4138	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4140	VRS-CY1JF000JY	0 1/16W 5% Metal Oxide	
	R4142	VRS-CY1JF000JY	0 1/16W 5% Metal Oxide	
	R4143	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4144	VRS-CY1JF102JY	1.0k 1/16W 5% Metal Oxide	
	R4145	VRS-CY1JF102JY	1.0k 1/16W 5% Metal Oxide	
	R4146	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4147	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4148	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4149	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4150	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4151	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4152	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4153	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4154	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4155	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4156	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4157	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4158	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4159	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4160	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4161	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4162	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4163	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4206	VRS-TV1JD102JY	1.0k 1/10W 5% Metal Oxide	
	R4220	VRS-CY1JF114FY	110k 1/16W 1% Metal Oxide	
	R4221	VRS-CY1JF822FY	8.2k 1/16W 1% Metal Oxide	
	R4222	VRS-TW2ED562JY	5.6k 1/4W 5% Metal Oxide	
	R4223	VRS-CY1JF183JY	18k 1/16W 5% Metal Oxide	
	R4224	VRS-TV1JD222JY	2.2k 1/10W 5% Metal Oxide	
	R4225	VRS-CY1JF682JY	6.8k 1/16W 5% Metal Oxide	
	R4226	VRS-TV1JD222JY	2.2k 1/10W 5% Metal Oxide	
	R4227	VRS-TW2ED821JY	820 1/4W 5% Metal Oxide	
	R4228	VRS-CY1JF103FY	10k 1/16W 1% Metal Oxide	
	R4229	VRS-CY1JF103FY	10k 1/16W 1% Metal Oxide	
	R4230	VRS-CY1JF103FY	10k 1/16W 1% Metal Oxide	
	R4231	VRS-CY1JF473FY	47k 1/16W 1% Metal Oxide	
	R4232	VRS-CY1JF102FY	1.0k 1/16W 1% Metal Oxide	
	R4233	VRS-CY1JF103JY	10k 1/16W 5% Metal Oxide	
	R4234	VRS-CY1JF273JY	27k 1/16W 5% Metal Oxide	
	R4235	VRS-CY1JF104JY	100k 1/16W 5% Metal Oxide	
	R4236	VRS-CY1JF133JY	13k 1/16W 5% Metal Oxide	
	R4237	VRS-CY1JF163FY	16k 1/16W 1% Metal Oxide	
	R4238	VRS-CY1JF511FY	510 1/16W 1% Metal Oxide	
	R4239	VRS-CY1JF244FY	240k 1/16W 1% Metal Oxide	
	R4240	VRS-CY1JF243FY	24k 1/16W 1% Metal Oxide	
	R4241	VRS-TV1JD101JY	100 1/10W 5% Metal Oxide	
	R4243	VRS-CY1JF104JY	100k 1/16W 5% Metal Oxide	
	R4244	VRS-TW2ED562JY	5.6k 1/4W 5% Metal Oxide	
	R4256	VRS-CY1JF104JY	100k 1/16W 5% Metal Oxide	
	R4261	VRS-TW2ED101JY	100 1/4W 5% Metal Oxide	
	R4262	VRS-CY1JF103JY	10k 1/16W 5% Metal Oxide	
	R4263	VRS-CY1JF330JY	33 1/16W 5% Metal Oxide	
	R4264	VRS-TW2ED101JY	100 1/4W 5% Metal Oxide	
	R4270	VRS-CY1JF104JY	100k 1/16W 5% Metal Oxide	
	R4271	VRS-CY1JF911FY	910 1/16W 1% Metal Oxide	
	R4272	VRS-CY1JF243FY	24k 1/16W 1% Metal Oxide	

PWB ASSY	REF NO.	PART NUMBER	DESCRIPTION	NOTE
	R4274	VRS-TV1JD000JY	0 1/10W 5% Metal Oxide	
	R4293	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4501	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4502	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4503	VRS-CY1JF472JY	4.7k 1/16W 5% Metal Oxide	
	R4504	VRS-CH1JF100JY	10 1/16W 5% Metal Oxide	
	R4505	VRS-CJ1JF330JY	33 1/16W 5% Metal Oxide	
	R4506	VRS-CH1JF100JY	10 1/16W 5% Metal Oxide	
	R4507	VRS-CJ1JF330JY	33 1/16W 5% Metal Oxide	
	R4508	VRS-CH1JF100JY	10 1/16W 5% Metal Oxide	
	R4509	VRS-CJ1JF330JY	33 1/16W 5% Metal Oxide	
	R4510	VRS-CY1JF133FY	13k 1/16W 1% Metal Oxide	
	R4511	VRS-CJ1JF330JY	33 1/16W 5% Metal Oxide	
	R4512	VRS-CH1JF390JY	39 1/16W 5% Metal Oxide	
	R4513	VRS-CH1JF390JY	39 1/16W 5% Metal Oxide	
	R4514	VRS-CH1JF390JY	39 1/16W 5% Metal Oxide	
	R4515	VRS-CH1JF390JY	39 1/16W 5% Metal Oxide	
	R4516	VRS-CH1JF390JY	39 1/16W 5% Metal Oxide	
	R4517	VRS-CH1JF390JY	39 1/16W 5% Metal Oxide	
	R4518	VRS-CH1JF390JY	39 1/16W 5% Metal Oxide	
	R4519	VRS-CH1JF390JY	39 1/16W 5% Metal Oxide	
	R4520	VRS-CH1JF390JY	39 1/16W 5% Metal Oxide	
	R4521	VRS-CH1JF390JY	39 1/16W 5% Metal Oxide	
	R4522	VRS-CH1JF390JY	39 1/16W 5% Metal Oxide	
	R4523	VRS-CY1JF472JY	4.7k 1/16W 5% Metal Oxide	
	R4524	VRS-CH1JF390JY	39 1/16W 5% Metal Oxide	
	R4525	VRS-CH1JF390JY	39 1/16W 5% Metal Oxide	
	R4526	VRS-CY1JF390JY	39 1/16W 5% Metal Oxide	
	R4527	VRS-CY1JF473JY	47k 1/16W 5% Metal Oxide	
	R4528	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4529	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4530	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4531	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4532	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4533	VRS-CY1JF472JY	4.7k 1/16W 5% Metal Oxide	
	R4534	VRS-CY1JF103JY	10k 1/16W 5% Metal Oxide	
	R4536	VRS-CY1JF000JY	0 1/16W 5% Metal Oxide	
	R4537	VRS-CY1JF000JY	0 1/16W 5% Metal Oxide	
	R4538	VRS-CY1JF104JY	100k 1/16W 5% Metal Oxide	
	R4601	VRS-CY1JF101FY	100 1/16W 1% Metal Oxide	
	R4602	VRS-CY1JF101FY	100 1/16W 1% Metal Oxide	
	R4603	VRS-CY1JF101FY	100 1/16W 1% Metal Oxide	
	R4604	VRS-CY1JF101FY	100 1/16W 1% Metal Oxide	
	R4605	VRS-CY1JF101FY	100 1/16W 1% Metal Oxide	
	R4607	VRS-CY1JF330JY	33 1/16W 5% Metal Oxide	
	R4608	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4609	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4610	VRS-CY1JF391JY	390 1/16W 5% Metal Oxide	
	R4619	VRS-CY1JF273JY	27k 1/16W 5% Metal Oxide	
	R4901	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4902	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4903	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4904	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4905	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4907	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R4909	VRS-CY1JF103JY	10k 1/16W 5% Metal Oxide	
	R4916	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4917	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4918	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4924	VRS-CY1JF334JY	330k 1/16W 5% Metal Oxide	
	R4925	VRS-CY1JF330JY	33 1/16W 5% Metal Oxide	
	R4926	VRS-CY1JF102JY	1.0k 1/16W 5% Metal Oxide	
	R4928	VRS-CY1JF334JY	330k 1/16W 5% Metal Oxide	
	R4929	VRS-CY1JF330JY	33 1/16W 5% Metal Oxide	
	R4930	VRS-CY1JF102JY	1.0k 1/16W 5% Metal Oxide	
	R4931	VRS-CY1JF514JY	510k 1/16W 5% Metal Oxide	
	R4932	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4933	VRS-CY1JF514JY	510k 1/16W 5% Metal Oxide	
	R4934	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4935	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4936	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	

PWB ASSY	REF NO.	PART NUMBER	DESCRIPTION	NOTE
	R4937	VRS-CY1JF514JY	510k 1/16W 5% Metal Oxide	
	R4938	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4939	VRS-CY1JF514JY	510k 1/16W 5% Metal Oxide	
	R4940	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4941	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4942	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4943	VRS-CY1JF514JY	510k 1/16W 5% Metal Oxide	
	R4944	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4945	VRS-CY1JF514JY	510k 1/16W 5% Metal Oxide	
	R4946	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4947	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4948	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4949	VRS-CY1JF514JY	510k 1/16W 5% Metal Oxide	
	R4950	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4951	VRS-CY1JF514JY	510k 1/16W 5% Metal Oxide	
	R4952	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4953	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4954	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4955	VRS-CY1JF514JY	510k 1/16W 5% Metal Oxide	
	R4956	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4957	VRS-CY1JF514JY	510k 1/16W 5% Metal Oxide	
	R4958	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4959	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4960	VRS-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R4961	VRS-CY1JF103JY	10k 1/16W 5% Metal Oxide	
	R7707	VRS-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R7708	VRS-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R7713	VRS-CY1JF104JY	100k 1/16W 5% Metal Oxide	
	R7714	VRS-CY1JF103JY	10k 1/16W 5% Metal Oxide	
	R7715	VRS-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R7717	VRS-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R7719	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R7720	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R7721	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R7722	VRS-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R7723	VRS-CY1JF103JY	10k 1/16W 5% Metal Oxide	
	R7724	VRS-TV1JD000JY	0 1/10W 5% Metal Oxide	
MISCELLANEOUS PARTS				
	FB4501	RBLN-0210TAZZY	Ferrite Bead	
	FB4502	RBLN-0210TAZZY	Ferrite Bead	
	FB4503	RBLN-0210TAZZY	Ferrite Bead	
	FB4504	RBLN-0210TAZZY	Ferrite Bead	
	FB4505	RBLN-A005WJZZY	Ferrite Bead	
	FB4601	RBLN-0210TAZZY	Ferrite Bead	
	FB4602	RBLN-0210TAZZY	Ferrite Bead	
	FB4603	RBLN-0210TAZZY	Ferrite Bead	
	FB7701	RBLN-A005WJZZY	Ferrite Bead	
	FB7702	RBLN-A005WJZZY	Ferrite Bead	
	FB7704	RBLN-A005WJZZY	Ferrite Bead	
	FB7705	RBLN-A005WJZZY	Ferrite Bead	
	P7701	QPLGNA176WJZZY	Plug	
	P7703	QPLGNA174WJZZY	Plug	
	SC4601	QSOCNA426WJZZY	Socket	
	SC4651	QSOCNA222WJZZY	Socket	
	SC4652	QSOCNA222WJZZY	Socket	
	LUG7702	QLUGHA006WJZZY	Lug	
	LUG7703	QLUGHA006WJZZY	Lug	
	LUG7704	QLUGHA006WJZZY	Lug	
	LUG7705	QLUGHA006WJZZY	Lug	
	LUG7706	QLUGHA006WJZZY	Lug	
Micro Processor Unit				
IC				
	IC2301	RH-iXB345WJZZQ	I.C.	
	IC2302	VHiBD4729G+-1Y	Bd4729G-Tr	
	IC2303	VHiBR24L08F-1Y	Br24L08F-WvE2	
	IC2305	VHiTCVT244AFTY	Tc74Vhct244Aft	
	IC2306	VHiBD5224G+-1Y	Bd5224G-Tr	
	IC2307	VHiLVX125FT-1Y	Tc74Lvx125Ft	
	IC2308	VHiTC7SH08U-1Y	Tc7Sh08Fu	
	IC5701	VHiBD4746G+-1Y	Bd4746G-Tr	
	IC5702	VHiPQ1L503M-1Y	Pq1L503M2Sp	

PWB ASSY	REF NO.	PART NUMBER	DESCRIPTION	NOTE
TRANSISTOR	IC5703	VHiPQ1CZ21H-1Y	Pq1Cz21H2Zp	
	IC5704	VHiBA033FP/-1Y	Ba033Fp-E2	
	Q2301	VSDTC144EE/-1Y	DTC144EE	
	Q2302	VSDTC144EE/-1Y	DTC144EE	
	Q2303	VSDTC144EE/-1Y	DTC144EE	
DIODE				
	D5701	VHDSFPB54//2EY	Diode	
PACKAGED CIRCUIT				
	X2301	RCRSC0032TAZZY	Crystal	
FILTER AND COIL				
	FL2301	RFILZ0169TAZZY	Filter	
	L5701	RCiLP0344TAZZY	Coil	
	L5702	RCiLP0343TAZZY	Coil	
	L5703	RCiLP0305TAZZY	Coil	
CAPACITOR				
	C2301	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C2302	VCCCCY1HH220JY	22p 50V Ceramic	
	C2303	VCCCCY1HH220JY	22p 50V Ceramic	
	C2304	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C2305	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C2306	VCKYCY1HB102KY	1000p 50V Ceramic	
	C2307	VCKYCY1HB102KY	1000p 50V Ceramic	
	C2308	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C2309	VCKYCY1HB103KY	0.01 50V Ceramic	
	C2310	VCKYCY1HB102KY	1000p 50V Ceramic	
	C2311	VCKYCY1HB102KY	1000p 50V Ceramic	
	C2312	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C2313	VCKYCY1HB102KY	1000p 50V Ceramic	
	C2314	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C2317	RC-KZA117WJZZY	Capacitor	
	C2318	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C2319	VCKYCY1HB152KY	1500p 50V Ceramic	
	C2320	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C2321	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C2322	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C5701	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C5702	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C5703	VCKYCY1HB103KY	0.01 50V Ceramic	
	C5704	VCEASY1CN107MY	100 16V Electrolytic	
	C5705	VCEASY1CN107MY	100 16V Electrolytic	
	C5706	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C5707	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C5708	VCEASX1CN226MY	22 16V Electrolytic	
	C5709	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C5710	VCCCCY1HH681JY	680p 50V Ceramic	
	C5711	VCEASY1EN477MY	470 25V Electrolytic	
	C5712	VCEASY1CN107MY	100 16V Electrolytic	
	C5713	VCKYCY1EF104ZY	0.1 25V Ceramic	
	C5727	VCAAPF1DJ826MY	82 20V Electrolytic	
	C5734	VCKYCY1EF104ZY	0.1 25V Ceramic	
RESISTOR				
	R2302	VRS-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2303	VRS-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2305	VRS-CY1JF394JY	390k 1/16W 5% Metal Oxide	
	R2306	VRS-CY1JF106JY	10 M 1/16W 5% Metal Oxide	
	R2307	VRS-CY1JF105JY	1.0 M 1/16W 5% Metal Oxide	
	R2308	VRS-CH1JF100JY	10 1/16W 5% Metal Oxide	
	R2310	VRS-CY1JF000JY	0 1/16W 5% Metal Oxide	
	R2311	VRS-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2312	VRS-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2313	VRS-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2316	VRS-CY1JF272JY	2.7k 1/16W 5% Metal Oxide	
	R2317	VRS-CY1JF683JY	68k 1/16W 5% Metal Oxide	
	R2318	VRS-TV1JD000JY	0 1/16W 5% Metal Oxide	
	R2319	VRS-CY1JF102JY	1.0k 1/16W 5% Metal Oxide	
	R2320	VRS-CY1JF333JY	33k 1/16W 5% Metal Oxide	
	R2321	VRS-CJ1JF100JY	10 1/16W 5% Metal Oxide	
	R2322	VRS-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2323	VRS-CY1JF000JY	0 1/16W 5% Metal Oxide	
	R2324	VRS-CY1JF223JY	22k 1/16W 5% Metal Oxide	

PWB ASSY	REF NO.	PART NUMBER	DESCRIPTION	NOTE
	R2325	VR-S-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R2326	VR-S-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R2327	VR-S-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2328	VR-S-CJ1JF101JY	100 1/16W 5% Metal Oxide	
	R2329	VR-S-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2330	VR-S-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R2331	VR-S-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R2332	VR-S-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R2333	VR-S-CY1JF104JY	100k 1/16W 5% Metal Oxide	
	R2334	VR-S-CY1JF683JY	68k 1/16W 5% Metal Oxide	
	R2335	VR-S-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R2336	VR-S-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R2337	VR-S-CY1JF683JY	68k 1/16W 5% Metal Oxide	
	R2338	VR-S-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R2339	VR-S-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2340	VR-S-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2342	VR-S-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R2343	VR-S-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R2344	VR-S-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R2346	VR-S-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R2347	VR-S-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R2348	VR-S-CY1JF104JY	100k 1/16W 5% Metal Oxide	
	R2349	VR-S-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2350	VR-S-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R2351	VR-S-CJ1JF100JY	10 1/16W 5% Metal Oxide	
	R2352	VR-S-CH1JF100JY	10 1/16W 5% Metal Oxide	
	R2353	VR-S-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R2354	VR-S-CY1JF104JY	100k 1/16W 5% Metal Oxide	
	R2355	VR-S-CY1JF104JY	100k 1/16W 5% Metal Oxide	
	R2357	VR-S-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R2358	VR-S-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R2359	VR-S-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R2360	VR-S-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2361	VR-S-CY1JF104JY	100k 1/16W 5% Metal Oxide	
	R2362	VR-S-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2363	VR-S-CY1JF103JY	10k 1/16W 5% Metal Oxide	
	R2364	VR-S-CY1JF102JY	1.0k 1/16W 5% Metal Oxide	
	R2365	VR-S-CJ1JF333JY	33k 1/16W 5% Metal Oxide	
	R2366	VR-S-CY1JF102JY	1.0k 1/16W 5% Metal Oxide	
	R2368	VR-S-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2369	VR-S-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2371	VR-S-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2373	VR-S-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2374	VR-S-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2375	VR-S-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R2376	VR-S-CY1JF103JY	10k 1/16W 5% Metal Oxide	
	R2377	VR-S-CY1JF103JY	10k 1/16W 5% Metal Oxide	
	R2380	VR-S-CY1JF102JY	1.0k 1/16W 5% Metal Oxide	
	R2381	VR-S-CY1JF102JY	1.0k 1/16W 5% Metal Oxide	
	R2382	VR-S-CY1JF104JY	100k 1/16W 5% Metal Oxide	
	R2383	VR-S-CY1JF104JY	100k 1/16W 5% Metal Oxide	
	R2387	VR-S-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R2388	VR-S-CY1JF100JY	10 1/16W 5% Metal Oxide	
	R2389	VR-S-CY1JF223JY	22k 1/16W 5% Metal Oxide	
	R3203	VR-S-TV1JD000JY	0 1/10W 5% Metal Oxide	
	R3204	VR-S-TV1JD000JY	0 1/10W 5% Metal Oxide	
	R5702	VR-S-CY1JF153FY	15k 1/16W 1% Metal Oxide	
	R5703	VR-S-CY1JF103FY	10k 1/16W 1% Metal Oxide	
	R5704	VR-S-CY1JF472JY	4.7k 1/16W 5% Metal Oxide	
	R5705	VR-S-CY1JF103JY	10k 1/16W 5% Metal Oxide	
	R5706	VR-S-TV1JD000JY	0 1/10W 5% Metal Oxide	
	R5707	VR-S-TV1JD000JY	0 1/10W 5% Metal Oxide	
	R5713	VR-S-CY1JF102FY	1.0k 1/16W 1% Metal Oxide	
	R5714	VR-S-CY1JF101JY	100 1/16W 5% Metal Oxide	
	R5715	VR-S-CY1JF562FY	5.6k 1/16W 1% Metal Oxide	
	R5716	VR-S-CY1JF622FY	6.2k 1/16W 1% Metal Oxide	
	R5721	VR-S-TV1JD000JY	0 1/10W 5% Metal Oxide	
MISCELLANEOUS PARTS				
	FB2301	RBLN-A005WJZZY	Frrite bead	
	FB2302	RBLN-A005WJZZY	Frrite bead	
	FB2303	RBLN-A005WJZZY	Frrite bead	



PWB ASSY	REF NO.	PART NUMBER	DESCRIPTION	NOTE
	FB2304	RBLN-A005WJZZY	Frrite bead	
	FB2305	RBLN-A005WJZZY	Frrite bead	
	FB2306	RBLN-A005WJZZY	Frrite bead	
	FB2307	RBLN-A005WJZZY	Frrite bead	
	FB2308	RBLN-A005WJZZY	Frrite bead	
	FB3200	RBLN-A005WJZZY	Frrite bead	
	FB5701	RBLN-0252TAZZY	Frrite bead	
	P2301	QPLGN0057CEZZY	Plug	
	P2302	QPLGN0064CEZZY	Plug	
	P2303	QPLGN0055CEZZY	Plug	
	P2304	QPLGN0059CEZZY	Plug	
	P3200	QPLGNA342WJZZY	Plug	
	P3201	QPLGNA346WJZZY	Plug	
	P3202	QPLGNA339WJZZY	Plug	
	P5701	QPLGNA177WJZZY	Plug	
	P5702	QPLGNA341WJZZY	Plug	
	SC3200	QSOCNA542WJPZY	Socket	LC32GA7L, LC32GS7L from 2142 sets
	SC3200	QSOCN0464FJZZY	Socket	LC32GS7L 1 to 2141 sets
	SC3201	QSOCNA543WJPZY	Socket	LC32GA7L, LC32GS7L from 2142 sets
	SC3201	QSOCN0486FJZZY	Socket	LC32GS7L 1 to 2141 sets
	SC3202	QSOCNA540WJPZY	Socket	
	LUG5701	QLUGHA006WJZZY	Lug	
	LUG5702	QLUGHA006WJZZY	Lug	
	LUG5703	QLUGHA006WJZZY	Lug	
	LUG5704	QLUGHA006WJZZY	Lug	
<b>INVERTER A UNIT</b>				
<b>IC</b>				
	IC7501	VHIBD9766FV/-1	BD9766FV	
	IC7502	VHINJM78L08UA	NJM78L08UA(TA7808F)	
<b>TRANSISTOR</b>				
	Q7501	VSRSS050P03-1	RSS050P03	
	Q7502	VSRSS065N03-1	RSS065N03	
	Q7503	VSRSS050P03-1	RSS050P03	
	Q7504	VSRSS065N03-1	RSS065N03	
	Q7505	VSRSS050P03-1	RSS050P03	
	Q7506	VSRSS065N03-1	RSS065N03	
	Q7507	VSRSS050P03-1	RSS050P03	
	Q7508	VSRSS065N03-1	RSS065N03	
	Q7509	VSRSS050P03-1	RSS050P03	
	Q7510	VSRSS065N03-1	RSS065N03	
	Q7511	VSUM6K1N///-1	UM6K1N	
<b>DIODE</b>				
	D7501	VHD1SS355//-1	1SS355	
	D7502	VHDDAN217U/-1	DAN217U	
	D7503	VHDDAN217U/-1	DAN217U	
	D7504	VHDDAN217U/-1	DAN217U	
	D7505	VHDDAN217U/-1	DAN217U	
	D7506	VHDDAN217U/-1	DAN217U	
	D7507	VHDDAN217U/-1	DAN217U	
	D7508	VHDDAN217U/-1	DAN217U	
	D7509	VHDDAN217U/-1	DAN217U	
	D7510	VHDDAN217U/-1	DAN217U	
	D7511	VHDDAN217U/-1	DAN217U	
	ZD7502	VHEHZU8.2B2-1	HZU8.2B2	
<b>TRANSFORMER</b>				
	T7501	RTRNZ1301SNPZ	CLT4123	
	T7502	RTRNZ1301SNPZ	CLT4123	
	T7503	RTRNZ1301SNPZ	CLT4123	
	T7504	RTRNZ1301SNPZ	CLT4123	
	T7505	RTRNZ1301SNPZ	CLT4123	
	T7506	RTRNZ1301SNPZ	CLT4123	
	T7507	RTRNZ1301SNPZ	CLT4123	
	T7508	RTRNZ1301SNPZ	CLT4123	
	T7509	RTRNZ1301SNPZ	CLT4123	
	T7510	RTRNZ1301SNPZ	CLT4123	
<b>CAPACITOR</b>				
	C7502	VCCCCY1HH331J	330pF,50V,CERAMIC	
	C7503	VCKYCY1HB222K	2200pF,50V,CERAMIC	
	C7504	VCKYCY1HB332K	3300pF,50V,CERAMIC	
	C7505	VCKYCY1HB222K	2200pF,50V,CERAMIC	

PWB ASSY	REF NO.	PART NUMBER	DESCRIPTION	NOTE
	C7506	VCKYCY1HB332K	3300pF,50V,CERAMIC	
	C7507	VCKYCY1EB104K	0.1uF,25V,CERAMIC	
	C7508	VCKYCY1CB224K	0.22uF,16V,CERAMIC	
	C7509	VCKYCY1AB225K	2.2uF,10V,CERAMIC	
	C7510	VCKYCY1AB225K	2.2uF,10V,CERAMIC	
	C7511	VCKYTV1EB475K	4.7uF,25V,CERAMIC	
	C7512	VCKYCY1EB104K	0.1uF,25V,CERAMIC	
	C7513	VCKYCY1EB104K	0.1uF,25V,CERAMIC	
	C7514	VCKYCY1EB473K	0.047uF,25V,CERAMIC	
	C7515	RC-E1E477HVPZ	470uF,25V, ELECTROLYTIC	
	C7516	RC-E1E477HVPZ	470uF,25V, ELECTROLYTIC	
	C7517	RC-E1E477HVPZ	470uF,25V, ELECTROLYTIC	
	C7518	RC-E1E477HVPZ	470uF,25V, ELECTROLYTIC	
	C7519	RC-E1E477HVPZ	470uF,25V, ELECTROLYTIC	
	C7520	VCKYTV1EB475K	4.7uF,25V,CERAMIC	
	C7521	VCKYTV1EB475K	4.7uF,25V,CERAMIC	
	C7522	VCKYTV1EB475K	4.7uF,25V,CERAMIC	
	C7523	VCKYTV1EB475K	4.7uF,25V,CERAMIC	
	C7524	VCKYTV1EB475K	4.7uF,25V,CERAMIC	
	C7525	VCKYTV1EB475K	4.7uF,25V,CERAMIC	
	C7526	VCKYTV1EB475K	4.7uF,25V,CERAMIC	
	C7527	VCKYTV1EB475K	4.7uF,25V,CERAMIC	
	C7528	VCKYTV1EB475K	4.7uF,25V,CERAMIC	
	C7529	VCKYTV1EB475K	4.7uF,25V,CERAMIC	
	C7530	RC-ECC3H050PY	5pF,5kV,CERAMIC	
	C7531	VCKYCY1HB682K	6800pF,50V,CERAMIC	
	C7532	VCKYTV2AB473K	0.047uF,100V,CERAMIC	
	C7533	RC-ECC3H050PY	5pF,5kV,CERAMIC	
	C7534	VCKYCY1HB682K	6800pF,50V,CERAMIC	
	C7535	VCKYTV2AB473K	0.047uF,100V,CERAMIC	
	C7536	RC-ECC3H050PY	5pF,5kV,CERAMIC	
	C7537	VCKYCY1HB682K	6800pF,50V,CERAMIC	
	C7538	VCKYTV2AB473K	0.047uF,100V,CERAMIC	
	C7539	RC-ECC3H050PY	5pF,5kV,CERAMIC	
	C7540	VCKYCY1HB682K	6800pF,50V,CERAMIC	
	C7541	VCKYTV2AB473K	0.047uF,100V,CERAMIC	
	C7542	RC-ECC3H050PY	5pF,5kV,CERAMIC	
	C7543	VCKYCY1HB682K	6800pF,50V,CERAMIC	
	C7544	VCKYTV2AB473K	0.047uF,100V,CERAMIC	
	C7545	RC-ECC3H050PY	5pF,5kV,CERAMIC	
	C7546	VCKYCY1HB682K	6800pF,50V,CERAMIC	
	C7547	VCKYTV2AB473K	0.047uF,100V,CERAMIC	
	C7548	RC-ECC3H050PY	5pF,5kV,CERAMIC	
	C7549	VCKYCY1HB682K	6800pF,50V,CERAMIC	
	C7550	VCKYTV2AB473K	0.047uF,100V,CERAMIC	
	C7551	RC-ECC3H050PY	5pF,5kV,CERAMIC	
	C7552	VCKYCY1HB682K	6800pF,50V,CERAMIC	
	C7553	VCKYTV2AB473K	0.047uF,100V,CERAMIC	
	C7554	RC-ECC3H050PY	5pF,5kV,CERAMIC	
	C7555	VCKYCY1HB682K	6800pF,50V,CERAMIC	
	C7556	VCKYTV2AB473K	0.047uF,100V,CERAMIC	
	C7557	RC-ECC3H050PY	5pF,5kV,CERAMIC	
	C7558	VCKYCY1HB682K	6800pF,50V,CERAMIC	
	C7559	VCKYTV2AB473K	0.047uF,100V,CERAMIC	
	C7560	VCKYCY1HB103K	0.01uF,50V,CERAMIC	
RESISTOR	R7501	VRS-CY1JD000J	0Ω 1/10W	
	R7504	VRS-CY1JD000J	0Ω 1/10W	
	R7505	VRS-CY1JD104J	100KΩ 1/10W	
	R7506	VRS-CY1JD104J	100KΩ 1/10W	
	R7507	VRS-CY1JD102J	1KΩ 1/10W	
	R7508	VRS-CY1JD363F	36KΩ 1/10W	
	R7509	VRS-CY1JD913F	91KΩ 1/10W	
	R7510	VRS-CY1JD102J	1KΩ 1/10W	
	R7511	VRS-CY1JD104J	100KΩ 1/10W	
	R7512	VRS-CY1JD000J	0Ω 1/10W	
	R7513	VRS-CY1JD104J	100KΩ 1/10W	
	R7514	VRS-CY1JD000J	0Ω 1/10W	
	R7515	VRS-CY1JD393F	39KΩ 1/10W	
	R7516	VRS-CY1JD683F	68KΩ 1/10W	
	R7517	VRS-CY1JD221J	220Ω 1/10W	

PWB ASSY	REF NO.	PART NUMBER	DESCRIPTION	NOTE
	R7518	VRS-CY1JD221J	220Ω 1/10W	
	R7519	VRS-CY1JD103J	10KΩ 1/10W	
	R7520	VRS-CY1JD103J	10KΩ 1/10W	
	R7521	VRS-CY1JD393F	39KΩ 1/10W	
	R7522	VRS-CY1JD683F	68KΩ 1/10W	
	R7523	VRS-CY1JD513J	51kΩ 1/10W	
	R7524	VRS-CY1JD513J	51kΩ 1/10W	
	R7525	VRS-CY1JD104F	100KΩ 1/10W	
	R7526	VRS-CY1JD103J	10KΩ 1/10W	
	R7527	VRS-CY1JD103J	10KΩ 1/10W	
	R7528	VRS-CY1JD220J	22Ω 1/10W	
	R7529	VRS-CY1JD220J	22Ω 1/10W	
	R7530	VRS-CY1JD220J	22Ω 1/10W	
	R7531	VRS-CY1JD220J	22Ω 1/10W	
	R7532	VRS-CY1JD220J	22Ω 1/10W	
	R7533	VRS-CY1JD220J	22Ω 1/10W	
	R7534	VRS-CY1JD220J	22Ω 1/10W	
	R7535	VRS-CY1JD220J	22Ω 1/10W	
	R7536	VRS-CY1JD220J	22Ω 1/10W	
	R7537	VRS-CY1JD220J	22Ω 1/10W	
	R7538	VRS-TS2AD000J	0Ω 1/8W	
	R7539	VRS-TS2AD000J	0Ω 1/8W	
FUSE				
	F7501	QFS-A1168SNPZ	5.0A 250V	
	F7502	QFS-A1168SNPZ	5.0A 250V	
MISCELLANEOUS PART				
	CN7501	QCNCM1818SNEZ	CONNECTOR	
	CN7502	QCNCM1819SNEZ	CONNECTOR	
	CN7503	QCNCM1822SNEZ	CONNECTOR	
	CN7504	QCNCM1821SNEZ	CONNECTOR	
	CN7505	QCNCM1821SNEZ	CONNECTOR	
	CN7506	QCNCM1821SNEZ	CONNECTOR	
	CN7507	QCNCM1821SNEZ	CONNECTOR	
	CN7508	QCNCM1821SNEZ	CONNECTOR	
INVERTER B UNIT				
TRANSISTOR				
	Q7401	VSRSS050P03-1	RSS050P03	
	Q7402	VSRSS065N03-1	RSS065N03	
	Q7403	VSRSS050P03-1	RSS050P03	
	Q7404	VSRSS065N03-1	RSS065N03	
	Q7405	VSRSS050P03-1	RSS050P03	
	Q7406	VSRSS065N03-1	RSS065N03	
	Q7407	VSRSS050P03-1	RSS050P03	
	Q7408	VSRSS065N03-1	RSS065N03	
DIODE				
	D7401	VHDDAN217U/-1	DAN217U	
	D7402	VHDDAN217U/-1	DAN217U	
	D7403	VHDDAN217U/-1	DAN217U	
	D7404	VHDDAN217U/-1	DAN217U	
	D7405	VHDDAN217U/-1	DAN217U	
	D7406	VHDDAN217U/-1	DAN217U	
	D7407	VHDDAN217U/-1	DAN217U	
	D7408	VHDDAN217U/-1	DAN217U	
	ZD7401	VHEHZU8.2B2-1	HZU8.2B2	
TRANSFORMER				
	T7401	RTRNZ1301SNPZ	CLT4123	
	T7402	RTRNZ1301SNPZ	CLT4123	
	T7403	RTRNZ1301SNPZ	CLT4123	
	T7404	RTRNZ1301SNPZ	CLT4123	
	T7405	RTRNZ1301SNPZ	CLT4123	
	T7406	RTRNZ1301SNPZ	CLT4123	
	T7407	RTRNZ1301SNPZ	CLT4123	
	T7408	RTRNZ1301SNPZ	CLT4123	
CAPACITOR				
	C7401	VCKYCY1EB473K	0.047uF,25V,CERAMIC	
	C7402	RC-E1E477HVPZ	470uF,25V,ELECTRORYTIC	
	C7403	RC-E1E477HVPZ	470uF,25V,ELECTRORYTIC	
	C7404	RC-E1E477HVPZ	470uF,25V,ELECTRORYTIC	
	C7405	RC-E1E477HVPZ	470uF,25V,ELECTRORYTIC	
	C7406	VCKYTV1EB475K	4.7uF,25V,CERAMIC	
	C7407	VCKYTV1EB475K	4.7uF,25V,CERAMIC	

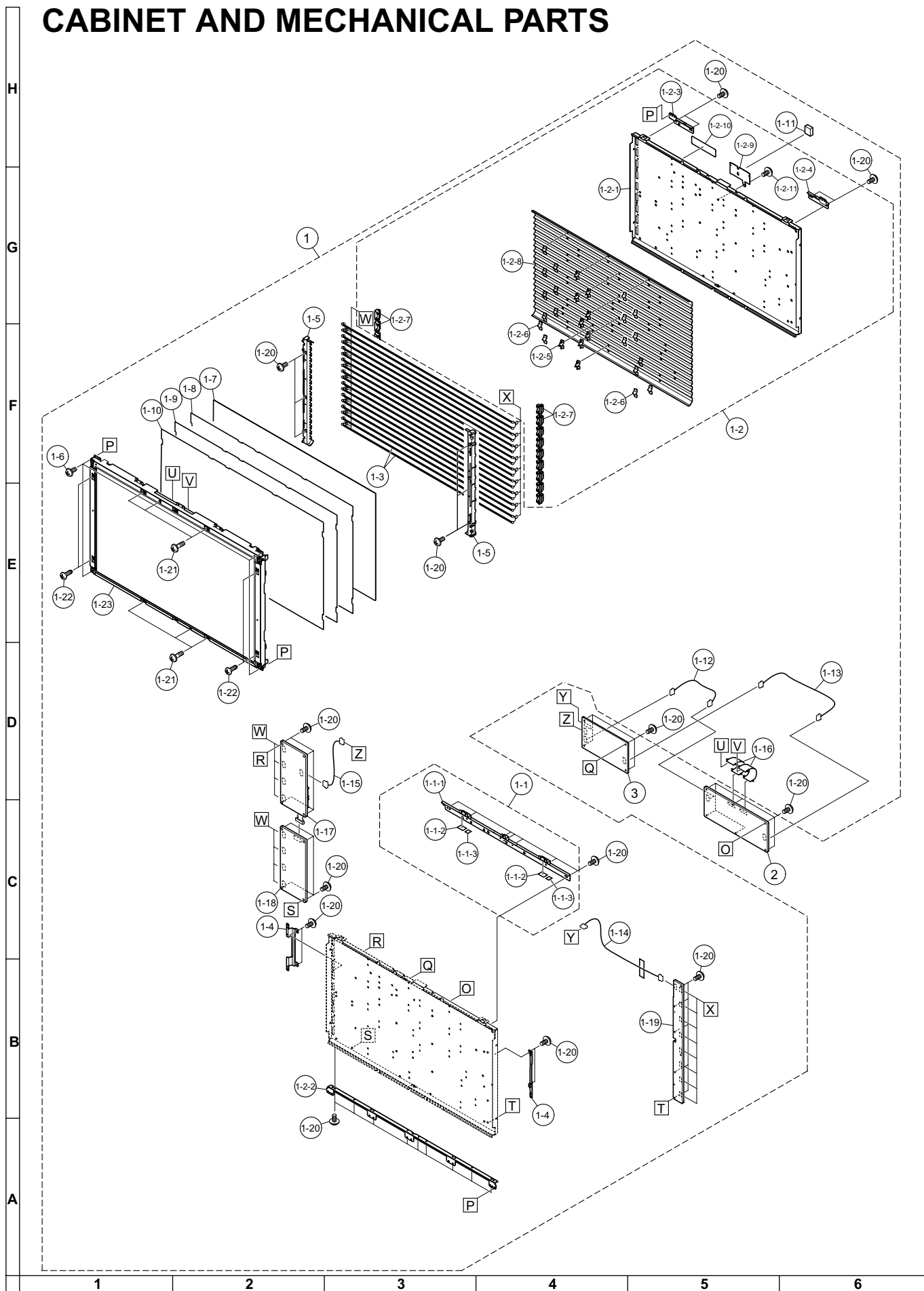
PWB ASSY	REF NO.	PART NUMBER	DESCRIPTION	NOTE
	C7408	VCKYTV1EB475K	4.7uF,25V,CERAMIC	
	C7409	VCKYTV1EB475K	4.7uF,25V,CERAMIC	
	C7410	VCKYTV1EB475K	4.7uF,25V,CERAMIC	
	C7411	VCKYTV1EB475K	4.7uF,25V,CERAMIC	
	C7412	VCKYTV1EB475K	4.7uF,25V,CERAMIC	
	C7413	VCKYTV1EB475K	4.7uF,25V,CERAMIC	
	C7414	RC-ECC3H050PY	5pF,5kV,CERAMIC	
	C7415	VCKYCY1HB682K	6800pF,50V,CERAMIC	
	C7416	VCKYTV2AB473K	0.047uF,100V,CERAMIC	
	C7417	RC-ECC3H050PY	5pF,5kV,CERAMIC	
	C7418	VCKYCY1HB682K	6800pF,50V,CERAMIC	
	C7419	VCKYTV2AB473K	0.047uF,100V,CERAMIC	
	C7420	RC-ECC3H050PY	5pF,5kV,CERAMIC	
	C7421	VCKYCY1HB682K	6800pF,50V,CERAMIC	
	C7422	VCKYTV2AB473K	0.047uF,100V,CERAMIC	
	C7423	RC-ECC3H050PY	5pF,5kV,CERAMIC	
	C7424	VCKYCY1HB682K	6800pF,50V,CERAMIC	
	C7425	VCKYTV2AB473K	0.047uF,100V,CERAMIC	
	C7426	RC-ECC3H050PY	5pF,5kV,CERAMIC	
	C7427	VCKYCY1HB682K	6800pF,50V,CERAMIC	
	C7428	VCKYTV2AB473K	0.047uF,100V,CERAMIC	
	C7429	RC-ECC3H050PY	5pF,5kV,CERAMIC	
	C7430	VCKYCY1HB682K	6800pF,50V,CERAMIC	
	C7431	VCKYTV2AB473K	0.047uF,100V,CERAMIC	
	C7432	RC-ECC3H050PY	5pF,5kV,CERAMIC	
	C7433	VCKYCY1HB682K	6800pF,50V,CERAMIC	
	C7434	VCKYTV2AB473K	0.047uF,100V,CERAMIC	
	C7435	RC-ECC3H050PY	5pF,5kV,CERAMIC	
	C7436	VCKYCY1HB682K	6800pF,50V,CERAMIC	
	C7437	VCKYTV2AB473K	0.047uF,100V,CERAMIC	
RESISTOR				
	r7401	VRS-CY1JD103J	10kΩ 1/10W	
	R7402	VRS-CY1JD103J	10kΩ 1/10W	
	R7403	VRS-CY1JD220J	22Ω 1/10W	
	R7404	VRS-CY1JD220J	22Ω 1/10W	
	R7405	VRS-CY1JD220J	22Ω 1/10W	
	R7406	VRS-CY1JD220J	22Ω 1/10W	
	R7407	VRS-CY1JD220J	22Ω 1/10W	
	R7408	VRS-CY1JD220J	22Ω 1/10W	
	R7409	VRS-CY1JD220J	22Ω 1/10W	
	R7410	VRS-CY1JD220J	22Ω 1/10W	
	R7411	VRS-TS2AD000J	0Ω 1/8W	
	R7412	VRS-TS2AD000J	0Ω 1/8W	
FUSE				
	F7401	QFS-A1168SNPZ	5.0A 250V	
	F7402	QFS-A1168SNPZ	5.0A 250V	
MISCELLANEOUS PART				
	CN7401	QCNCM1817SNEZ	CONNECTOR,B2P-VH	
	CN7402	QCNCM1823SNEZ	CONNECTOR,05R-FJ	
	CN7403	QCNCM1821SNEZ	CONNECTOR,1717823-1	
	CN7404	QCNCM1821SNEZ	CONNECTOR,1717823-1	
	CN7405	QCNCM1821SNEZ	CONNECTOR,1717823-1	
	CN7406	QCNCM1821SNEZ	CONNECTOR,1717823-1	
INVERTER GND UNIT				
TRANSISTOR				
	Q7601	VSUM6K1N///-1	UM6K1N	
	Q7602	VSUM6K1N///-1	UM6K1N	
	Q7603	VSUM6K1N///-1	UM6K1N	
	Q7604	VSUM6K1N///-1	UM6K1N	
	Q7605	VSUM6K1N///-1	UM6K1N	
	Q7607	VSUM6K1N///-1	UM6K1N	
	Q7608	VSUM6K1N///-1	UM6K1N	
	Q7609	VSUM6K1N///-1	UM6K1N	
	Q7610	VSUM6K1N///-1	UM6K1N	
	Q7611	VSUM6K1N///-1	UM6K1N	
	Q7612	VSUM6K1N///-1	UM6K1N	
	Q7613	VSUM6K1N///-1	UM6K1N	
	Q7614	VSUM6K1N///-1	UM6K1N	
	Q7616	VSUM6K1N///-1	UM6K1N	
	Q7617	VSUM6K1N///-1	UM6K1N	
	Q7618	VSUM6K1N///-1	UM6K1N	

PWB ASSY	REF NO.	PART NUMBER	DESCRIPTION	NOTE
THERMISTOR	TH7608	VHH18XH103J03	NCP18XH103J03RB	
DIODE	D7601	VHD1SS355//-1	1SS355	
	D7602	VHD1SS355//-1	1SS355	
	D7603	VHD1SS355//-1	1SS355	
	D7604	VHD1SS355//-1	1SS355	
	D7605	VHD1SS355//-1	1SS355	
	D7607	VHD1SS355//-1	1SS355	
	D7608	VHD1SS355//-1	1SS355	
	D7609	VHD1SS355//-1	1SS355	
	D7610	VHD1SS355//-1	1SS355	
	D7611	VHD1SS355//-1	1SS355	
	D7612	VHD1SS355//-1	1SS355	
	D7613	VHD1SS355//-1	1SS355	
	D7614	VHD1SS355//-1	1SS355	
	D7616	VHD1SS355//-1	1SS355	
	D7617	VHD1SS355//-1	1SS355	
	D7618	VHD1SS355//-1	1SS355	
	D7624	VHDDAN217U/-1	DAN217U	
	D7633	VHDDAN217U/-1	DAN217U	
CAPACITOR	C7601	VCKYCY1CB224K	0.22uF,16V,CERAMIC	
	C7602	VCKYCY1CB224K	0.22uF,16V,CERAMIC	
	C7603	VCKYCY1CB224K	0.22uF,16V,CERAMIC	
	C7604	VCKYCY1CB224K	0.22uF,16V,CERAMIC	
	C7605	VCKYCY1CB224K	0.22uF,16V,CERAMIC	
	C7607	VCKYCY1CB224K	0.22uF,16V,CERAMIC	
	C7608	VCKYCY1CB224K	0.22uF,16V,CERAMIC	
	C7609	VCKYCY1CB224K	0.22uF,16V,CERAMIC	
	C7610	VCKYCY1CB224K	0.22uF,16V,CERAMIC	
	C7611	VCKYCY1CB224K	0.22uF,16V,CERAMIC	
	C7612	VCKYCY1CB224K	0.22uF,16V,CERAMIC	
	C7613	VCKYCY1CB224K	0.22uF,16V,CERAMIC	
	C7614	VCKYCY1CB224K	0.22uF,16V,CERAMIC	
	C7616	VCKYCY1CB224K	0.22uF,16V,CERAMIC	
	C7617	VCKYCY1CB224K	0.22uF,16V,CERAMIC	
	C7618	VCKYCY1CB224K	0.22uF,16V,CERAMIC	
RESISTOR	R7601	VRS-CY1JD102J	1kΩ 1/10W	
	R7602	VRS-CY1JD155J	1.5MΩ 1/10W	
	R7605	VRS-CY1JD104J	100KΩ 1/10W	
	R7606	VRS-CY1JD102J	1kΩ 1/10W	
	R7607	VRS-CY1JD155J	1.5MΩ 1/10W	
	R7610	VRS-CY1JD104J	100KΩ 1/10W	
	R7611	VRS-CY1JD102J	1kΩ 1/10W	
	R7612	VRS-CY1JD155J	1.5MΩ 1/10W	
	R7615	VRS-CY1JD104J	100KΩ 1/10W	
	R7616	VRS-CY1JD102J	1kΩ 1/10W	
	R7617	VRS-CY1JD155J	1.5MΩ 1/10W	
	R7620	VRS-CY1JD104J	100KΩ 1/10W	
	R7621	VRS-CY1JD102J	1kΩ 1/10W	
	R7622	VRS-CY1JD155J	1.5MΩ 1/10W	
	R7625	VRS-CY1JD104J	100KΩ 1/10W	
	R7626	VRS-CY1JD103J	10KΩ 1/10W	
	R7627	VRS-CY1JD132F	1.3kΩ 1/10W	
	R7628	VRS-CY1JD132F	1.3KΩ 1/10W	
	R7629	VRS-CY1JD000J	0Ω 1/10W	
	R7631	VRS-CY1JD102J	1kΩ 1/10W	
	R7632	VRS-CY1JD155J	1.5MΩ 1/10W	
	R7835	VRS-CY1JD104J	100KΩ 1/10W	
	R7636	VRS-CY1JD102J	1kΩ 1/10W	
	R7637	VRS-CY1JD155J	1.5MΩ 1/10W	
	R7640	VRS-CY1JD104J	100KΩ 1/10W	
	R7641	VRS-CY1JD102J	1kΩ 1/10W	
	R7642	VRS-CY1JD155J	1.5MΩ 1/10W	
	R7645	VRS-CY1JD104J	100KΩ 1/10W	
	R7646	VRS-CY1JD102J	1kΩ 1/10W	
	R7647	VRS-CY1JD155J	1.5MΩ 1/10W	
	R4650	VRS-CY1JD104J	100KΩ 1/10W	
	R4651	VRS-CY1JD102J	1kΩ 1/10W	

PWB ASSY	REF NO.	PART NUMBER	DESCRIPTION	NOTE
	R4652	VRS-CY1JD155J	1.5MΩ 1/10W	
	R7655	VRS-CY1JD104J	100KΩ 1/10W	
	R7656	VRS-CY1JD102J	1kΩ 1/10W	
	R7657	VRS-CY1JD155J	1.5MΩ 1/10W	
	R7660	VRS-CY1JD104J	100KΩ 1/10W	
	R7661	VRS-CY1JD102J	1kΩ 1/10W	
	R7662	VRS-CY1JD155J	1.5MΩ 1/10W	
	R7665	VRS-CY1JD104J	100KΩ 1/10W	
	R7666	VRS-CY1JD102J	1kΩ 1/10W	
	R7667	VRS-CY1JD155J	1.5MΩ 1/10W	
	R7670	VRS-CY1JD104J	100KΩ 1/10W	
	R7671	VRS-CY1JD103J	10KΩ 1/10W	
	R7672	VRS-CY1JD132F	1.3kΩ 1/10W	
	R7673	VRS-CY1JD132F	1.3KΩ 1/10W	
	R7674	VRS-CY1JD000J	0Ω 1/10W	
	R7676	VRS-CY1JD102J	1kΩ 1/10W	
	R7677	VRS-CY1JD155J	1.5MΩ 1/10W	
	R7680	VRS-CY1JD104J	100KΩ 1/10W	
	R7681	VRS-CY1JD102J	1kΩ 1/10W	
	R7682	VRS-CY1JD155J	1.5MΩ 1/10W	
	R7685	VRS-CY1JD104J	100KΩ 1/10W	
	R7686	VRS-CY1JD102J	1kΩ 1/10W	
	R7687	VRS-CY1JD155J	1.5MΩ 1/10W	
	R7690	VRS-CY1JD104J	100KΩ 1/10W	
MISCELLANEOUS PART				
	CN7601	QCNCM1844SNEZ	CONNECTOR,SM08B-PASS-TB	
	CN7602	QCNCM1821SNEZ	CONNECTOR	
	CN7603	QCNCM1821SNEZ	CONNECTOR	
	CN7604	QCNCM1821SNEZ	CONNECTOR	
	CN7605	QCNCM1821SNEZ	CONNECTOR	
	CN7606	QCNCM1821SNEZ	CONNECTOR	
	CN7607	QCNCM1821SNEZ	CONNECTOR	
	CN7608	QCNCM1821SNEZ	CONNECTOR	
	CN7609	QCNCM1821SNEZ	CONNECTOR	
	CN7610	QCNCM1821SNEZ	CONNECTOR	
	JP7601	VRS-TS2AD000J	0Ω1/8w	
	JP7602	VRS-TS2AD000J	0Ω1/8w	
	JP7603	VRS-TS2AD000J	0Ω1/8w	
	JP7604	VRS-TS2AD000J	0Ω1/8w	
	JP7605	VRS-TS2AD000J	0Ω1/8w	
	JP7606	VRS-TS2AD000J	0Ω1/8w	
	JP7607	VRS-TS2AD000J	0Ω1/8w	
	JP7608	VRS-TS2AD000J	0Ω1/8w	
	JP7609	VRS-TS2AD000J	0Ω1/8w	
	JP7610	VRS-TS2AD000J	0Ω1/8w	
	JP7611	VRS-TS2AD000J	0Ω1/8w	
	JP7612	VRS-TS2AD000J	0Ω1/8w	
	JP7613	VRS-TS2AD000J	0Ω1/8w	
	JP7614	VRS-TS2AD000J	0Ω1/8w	
	JP7615	VRS-TS2AD000J	0Ω1/8w	
	JP7616	VRS-TS2AD000J	0Ω1/8w	
	JP7617	VRS-TS2AD000J	0Ω1/8w	
	JP7618	VRS-TS2AD000J	0Ω1/8w	
MECHANICAL PARTS				
	1	Not Available	32吋 Wide LCD Panel Unit Assy	
	1-1	CANGKA518WJ01	Fixing Angle Top Assy	
	1-1-1	Not Available	Fixing Angle Top	
	1-1-2	PSHEZA033WJZZ	Spacer (L), x2	
	1-1-3	PSHEZA034WJZZ	Spacer (S), x2	
	1-2	CCHSMA217WJ01	Chassis Assy	
	1-2-1	Not Available	B/L Chassis	
	1-2-2	LANGKA521WJFW	Fixing Angle Bottom	
	1-2-3	LANGKA524WJFW	BL Fixing Angle Top (R)	
	1-2-4	LANGKA525WJFW	BL Fixing Angle Top (L)	
	1-2-5	LHLDZA616WJKZ	Lamp Clip, x9	
	1-2-6	LHLDZA619WJKZ	Sheet Clip, x18	
	1-2-7	PGUMMA009WJKA	Lamp Rubber, x18	
	1-2-8	PMIR-A086WJZZ	Mirror	
	1-2-9	PRDARA248WJFW	Radiator	
	1-2-10	TCAUZA031WJZZ	Caution Label	
	1-2-11	XBPS730P06WS0	Screw M3*6, x14	

PWB ASSY	REF NO.	PART NUMBER	DESCRIPTION	NOTE
	1-3	KLMP-A069WJZZ	Lamp, x9	
	1-4	LANGKA544WJFW	CAB Fix Side Angle, x2	
	1-5	LHLDZA613WJKZ	Lamp Holder, x2	
	1-6	LX-BZA051WJFN	Screw M4X10, x4	
	1-7	PCOVUA059WJZZ	Diffusion Panel	
	1-8	PSHEPA325WJZZ	Diffusion Sheet	
	1-9	PSHEPA340WJZZ	Prism Sheet	
	1-10	PSHEPA341WJZZ	Reflection/Deflection Sheet	
	1-11	PSPAZA693WJKZ	IC4101 Cool	
	1-12	QCNW-D529WJQZ	Connecting Cord (BL)	
	1-13	QCNW-D530WJQZ	Connecting Cord (PL)	
	1-14	QCNW-D532WJQZ	Connecting Cord (GV)	
	1-15	QCNW-D631WJQZ	Connecting Cord (BA)	
	1-16	QPWBMC494WJPZ	Panel FPC, x2	
	1-17	RUNTKA144WJZZ	INVERTER-1 Unit	
	1-18	RUNTKA145WJZZ	INVERTER-2 Unit	
	1-19	RUNTKA146WJZZ	INVERTER GND Unit	
	1-20	XBPS730P06WS0	Screw For INV/CNT, x38	
	1-21	XBPSN30P10000	Screw M3X10 B/L CHS, x6	
	1-22	XEPS930P10000	Screw M3X10 BLACK, x4	
	1-23	RLCDA071WJZZ	32" Wide LCD Panel Unit	
	2	DUNTKD025VJ04	LCD CONTROL Unit	
	3	DUNTKD165VJ02	MICRO PROCESSOR Unit	

# CABINET AND MECHANICAL PARTS

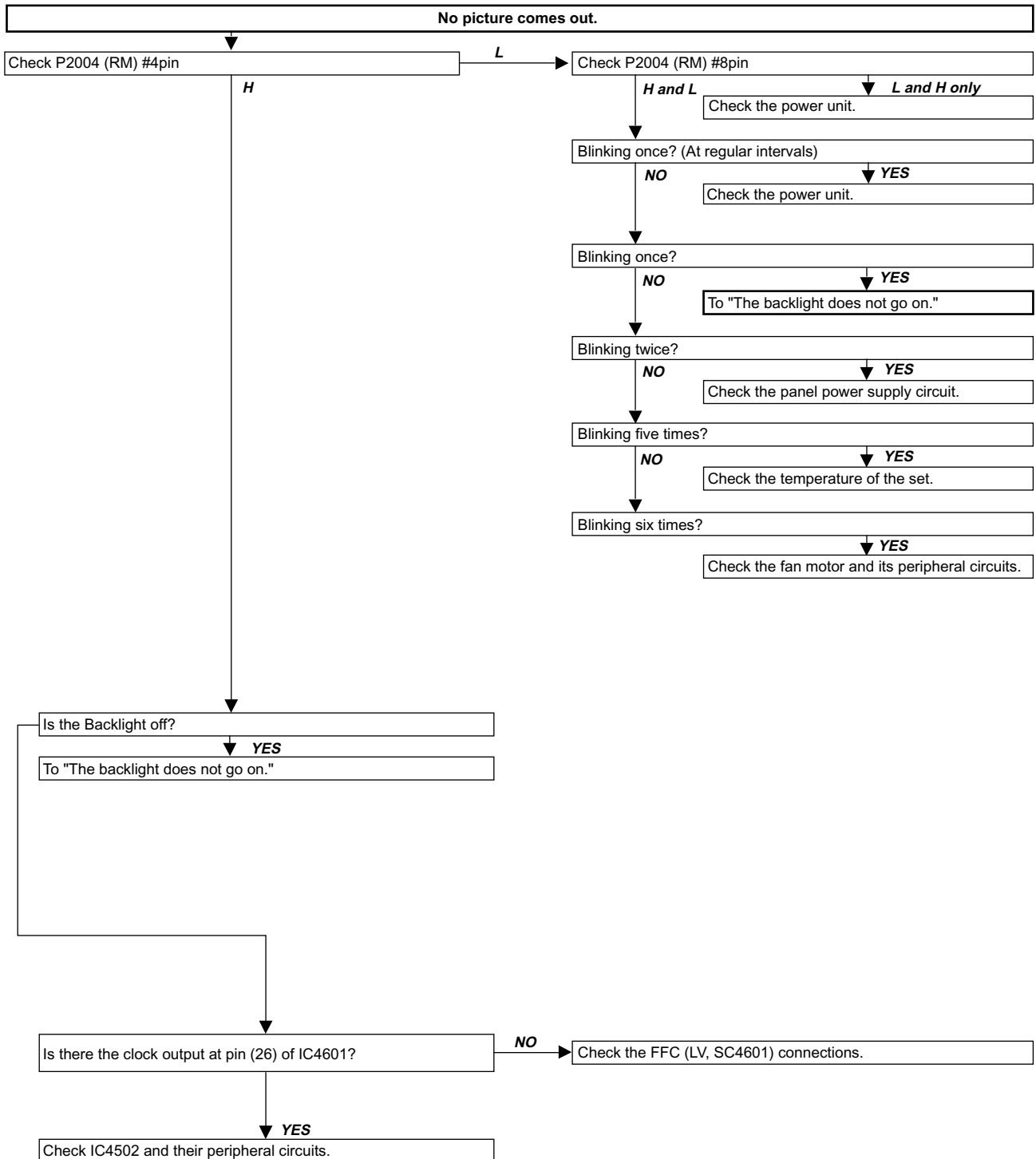




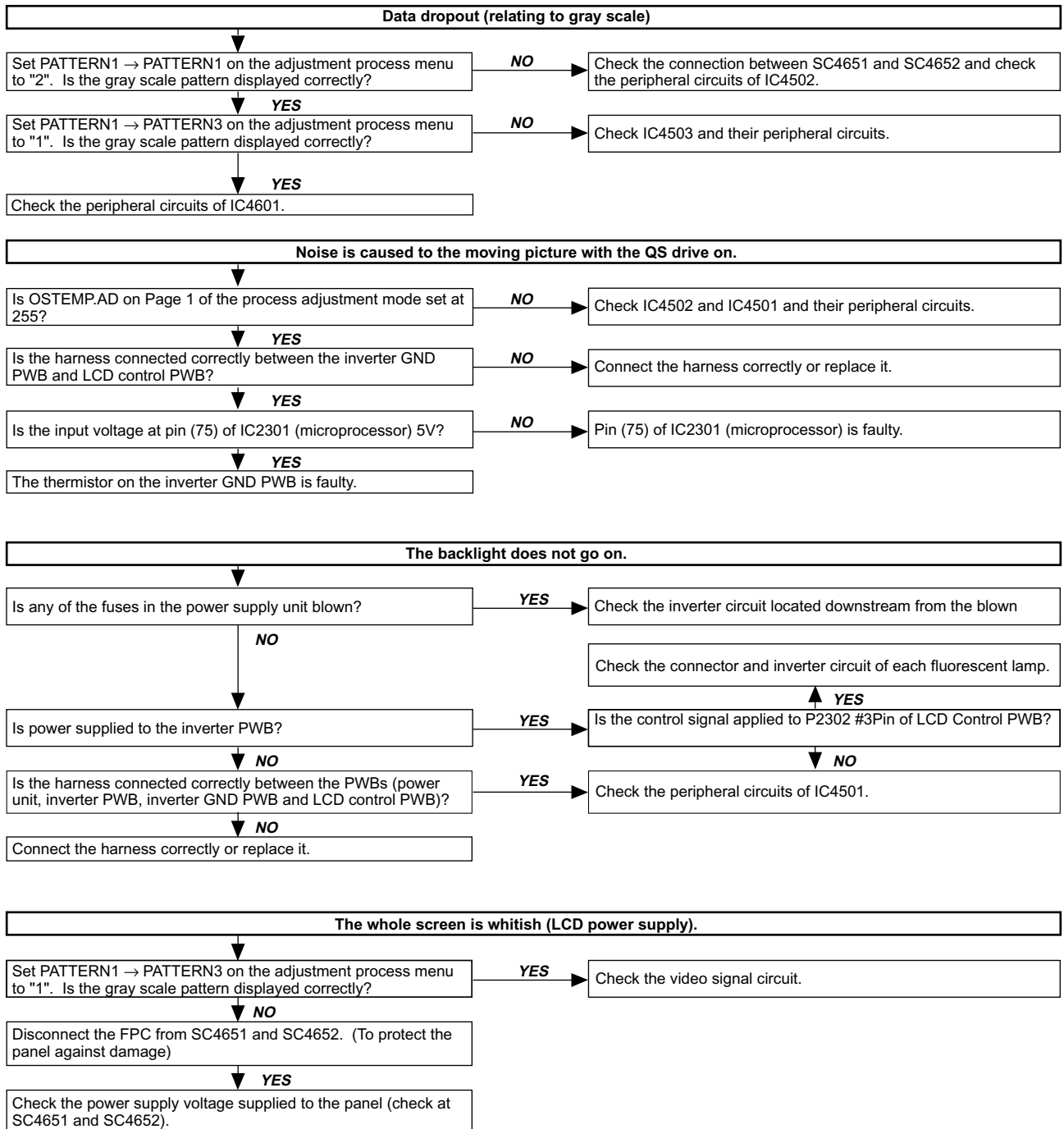
## PARTS LIST

REF. NO.	PART NUMBER	DESCRIPTION
1	Not Available	32" Wide LCD Panel Unit Ass'y
1-1	CANGKA518WJ01	Fixing Angle Top Ass'y
1-1-1	Not Available	Fixing Angle Top
1-1-2	PSHEZA033WJZZ	Spacer (L), x2
1-1-3	PSHEZA034WJZZ	Spacer (S), x2
1-2	CCHSMA217WJ01	Chassis Ass'y
1-2-1	Not Available	B/L Chassis
1-2-2	LANGKA521WJFW	Fixing Angle Bottom
1-2-3	LANGKA524WJFW	BL Fixing Angle Top (R)
1-2-4	LANGKA525WJFW	BL Fixing Angle Top (L)
1-2-5	LHLDZA616WJKZ	Lamp Clip, x9
1-2-6	LHLDZA619WJKZ	Sheet Clip, x18
1-2-7	PGUMMA009WJKA	Lamp Rubber, x18
1-2-8	PMiR-A086WJZZ	Mirror
1-2-9	PRDARA248WJFW	Radiator
1-2-10	TCAUZA031WJZZ	Caution Label
1-2-11	XBPS730P06WS0	Screw M3*6, x14
1-3	KLMP-A069WJZZ	Lamp, x9
1-4	LANGKA544WJFW	CAB Fix Side Angle, x2
1-5	LHLDZA613WJKZ	Lamp Holder, x2
1-6	LX-BZA051WJFN	Screw M4X10, x4
1-7	PCOVUA059WJZZ	Diffusion Panel
1-8	PSHEPA325WJZZ	Diffusion Sheet
1-9	PSHEPA340WJZZ	Prism Sheet
1-10	PSHEPA341WJZZ	Reflection/Deflection Sheet
1-11	PSPAZA693WJKZ	IC4101 Cool
1-12	QCNW-D529WJQZ	Connecting Cord (BL)
1-13	QCNW-D530WJQZ	Connecting Cord (PL)
1-14	QCNW-D532WJQZ	Connecting Cord (GV)
1-15	QCNW-D631WJQZ	Connecting Cord (BA)
1-16	QPWBMC494WJPZ	Panel FPC, x2
1-17	RUNTKA144WJZZ	INVERTER-1 Unit
1-18	RUNTKA145WJZZ	INVERTER-2 Unit
1-19	RUNTKA146WJZZ	INVERTER GND Unit
1-20	XBPS730P06WS0	Screw For INV/CNT, x38
1-21	XBPSN30P10000	Screw M3X10 B/L CHS, x6
1-22	XEPS930P10000	Screw M3X10 BLACK, x4
1-23	RLCDA071WJZZ	32" Wide LCD Panel Unit
2	DUNTKD025VJ04	LCD CONTROL Unit
3	DUNTKD165VJ02	MICRO PROCESSOR Unit

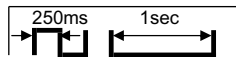
# TROUBLE SHOOTING TABLE



# TROUBLE SHOOTING TABLE (Continued)



## LED Flash Timing Chart in Case of Errors



### 1) Red power LED

#### Remarks

Type of error	Red power LED behavior (one cycle)	Monitor microprocessor pin
<b>Lamp error</b> One flash: Quick	H: ON L: OFF	L_FL_ERR (pin 73): Error at L. Established when repeated continuously 5 times at 1-second intervals (detected only while the backlight is on). Note that no startup is made after a total of 5 times in any process than monitor. The total will be cleared with the setting in the monitor process or in 30 minutes of continuous light-up.
<b>Power error</b> Two flashes	H: ON L: OFF	2) Refer to "Power error details".
<b>Communication error with main CPU</b> Three flashes	H: ON L: OFF	3) Refer to "Communication error details". Communication line or main CPU communication in trouble. Check the main CPU debug print.
<b>Monitor temperature error</b> Five flashes	H: ON L: OFF	CAUTION characters flashing in red at bottom right (AVC OSD) if the panel temperature is over 60°C longer than 15 seconds. Error standby mode if the panel temperature is over 60°C longer than 25 seconds. (OSTEMP in monitor process OTHER2: Thermistor AD value displayed, TEMP ERR on FAN page: Temperature error AD value modified): Thermistor

### 2) Power error details (power LED with 2 flashes + notice LED flashing)

#### Remarks

Type of error	Notice LED behavior (one cycle)	Monitor microprocessor pin unless otherwise specified
<b>15V error</b> One flash	H: ON L: OFF	15V_CHK (pin 31): Error at L. 15V voltage not applied. Detected at startup only. Restarted by interrupt if detected during operation (momentary stop).
<b>Two flashes</b>	H: ON L: OFF	Not used.
<b>9V(A) error</b> Three flashes	H: ON L: OFF	CSEN1 (pin 34): Error at L. Detected at startup and during operation (interrupt).
<b>VSH3.3V error</b> Four flashes	H: ON L: OFF	VSH_IN (pin 36): Error at H. VSH3.3V voltage not applied. Detected at startup and during operation (interrupt).
<b>LCD controller PWB 3.3V error</b> Five flashes	H: ON L: OFF	FREERUN (pin 59): Error at L or STB (pin 32): Error at L. LCD controller 3.3V voltage not applied. Detected at startup and during operation (interrupt). Check pin 59 (FREERUN) at startup and pin 32 (STB) at lamp light-up.
<b>Six flashes</b>	H: ON L: OFF	Not used.

### 3) Communication error details (power LED with 3 flashes + notice LED flashing)

#### Remarks

Type of error	Notice LED behavior (one cycle)	Basically, debug print log analysis and bus monitor communication log analysis
<b>Initial communication signal reception error</b> One flash	H: ON L: OFF	No reception of initial communication signal from main CPU. (Monitor ID request signal not received) Communication line or main CPU startup in trouble.
<b>Startup confirm signal reception error</b> Two flashes	H: ON L: OFF	No reception of startup confirm signal from main CPU. (Startup signal up to notice 22h not received) Main CPU startup or monitor microprocessor signal reception in trouble.
<b>Periodic communication error</b> Three flashes	H: ON L: OFF	Periodic every-second communication interrupted while in usual operation. Main CPU operation or monitor microprocessor signal reception in trouble.
<b>Restart error</b> Four flashes	H: ON L: OFF	No reception of software-based restart complete notice signal (from standby on/off, for example). Main CPU restart or monitor microprocessor signal reception in trouble.

Power LED: P2304(RM) #8Pin  
Notice LED: TP2301 (IC2301 #22Pin)

## Error Standby Chart in Monitor Process

**Outline:** Communication errors and power failures that the monitor microprocessor detects are put in memory. The last error status can be therefore reviewed in the monitor process.

**Location:** 3rd line on page 0 of the monitor process: ERR STBY items. "0" is shown if there has been no error. Using the cursor, the memory can be reset to zero.

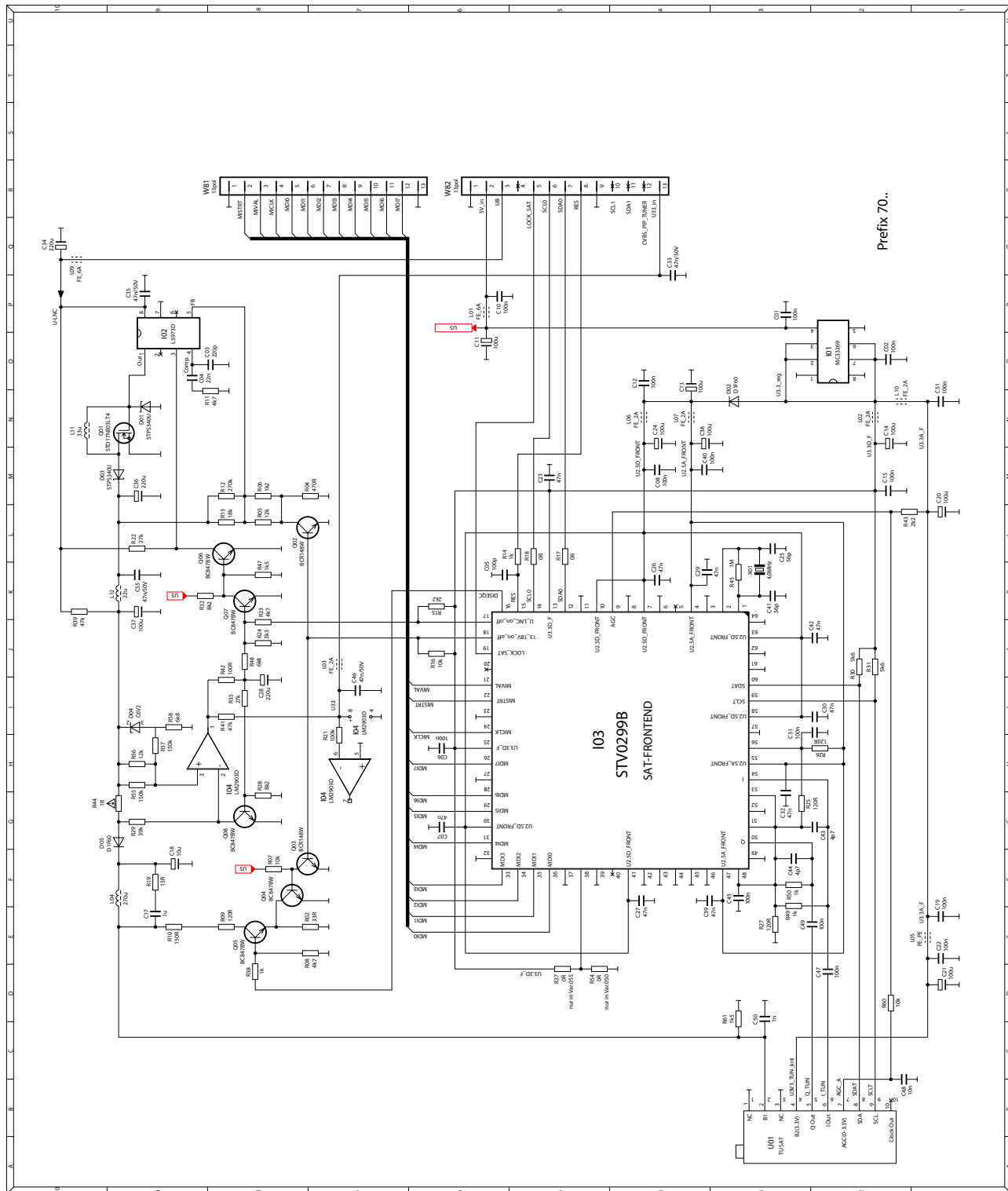
Display	Error description	
1	Start communication error 1	Not used.
2	Start communication error 2	No signal reception from main CPU in initial communication.
3	Start communication error 3	Signal reception in initial communication only.
4	Start communication error 4	Up to communication setting signal reception.
5	Start communication error 5	Up to initialization complete signal reception.
6	Start communication error 6	Up to version notice signal reception.
7	Start communication error 7	Up to start info notice signal reception.
8	Start communication error 8	Up to start info response signal reception.
9	Start communication error 9	Up to time-out setting signal reception.
A	Communication error A	Request time-out.
B	Communication error B	Restart time-out.
C	Communication error C	End sequence time-out.
D	Communication error D	Advance start time-out during ending.
E	Communication error E	Not used.
F	Communication error F	Not used.
G	Communication error G	High-speed end sequence time-out.
H	Communication error H	Periodic communication time-out.
I	Communication error I	Standby shift time-out.
J	Communication error J	Not used.
K	Communication error K	Not used.
L	Red power LED flashing 0	Not used.
M	Red power LED flashing 1	Lamp error.
N	Red power LED flashing 2	Not used.
O	Red power LED flashing 3	Not used.
P	Red power LED flashing 4	Not used.
Q	Red power LED flashing 5	Monitor temperature error.
R	Red power LED flashing 6	Not used.
S	Red power LED flashing 7	Not used.
T	Green LED flashing 1	15V error.
U	Green LED flashing 2	Not used.
V	Green LED flashing 3	CSEN1 error.
W	Green LED flashing 4	VSH3.3V error.
X	Green LED flashing 5	LCD controller 3.3V error.
Y	Green LED flashing 6	Not used.
Z	Main error	Error standby request from main CPU.

Red power LED: P2304(RM) #8Pin

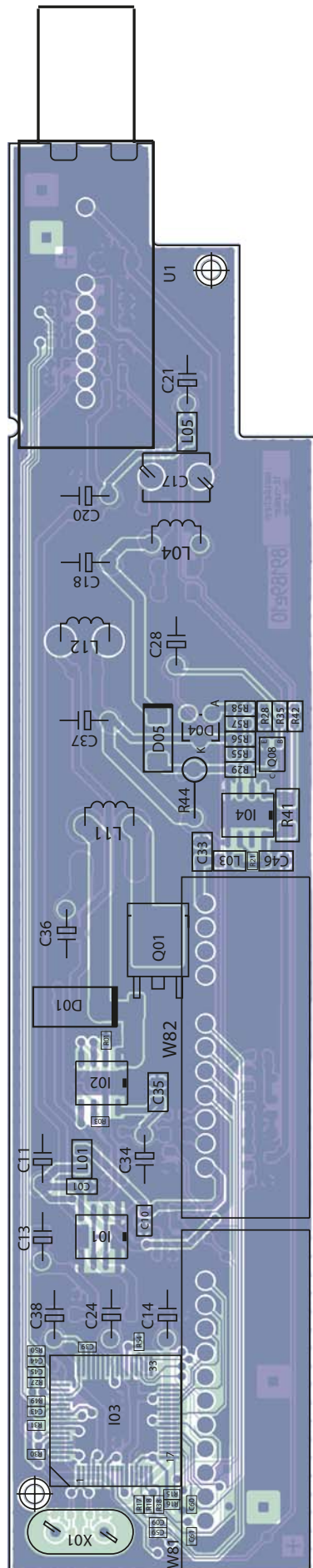
Green LED: TP2301 (IC2301 #22Pin)

## Appendix

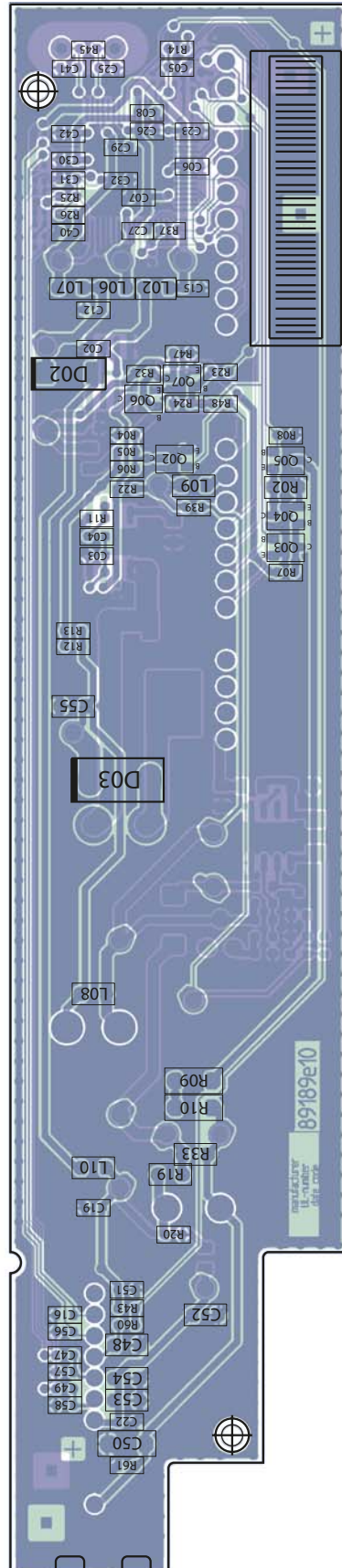
## DVB-S Frontend L2650



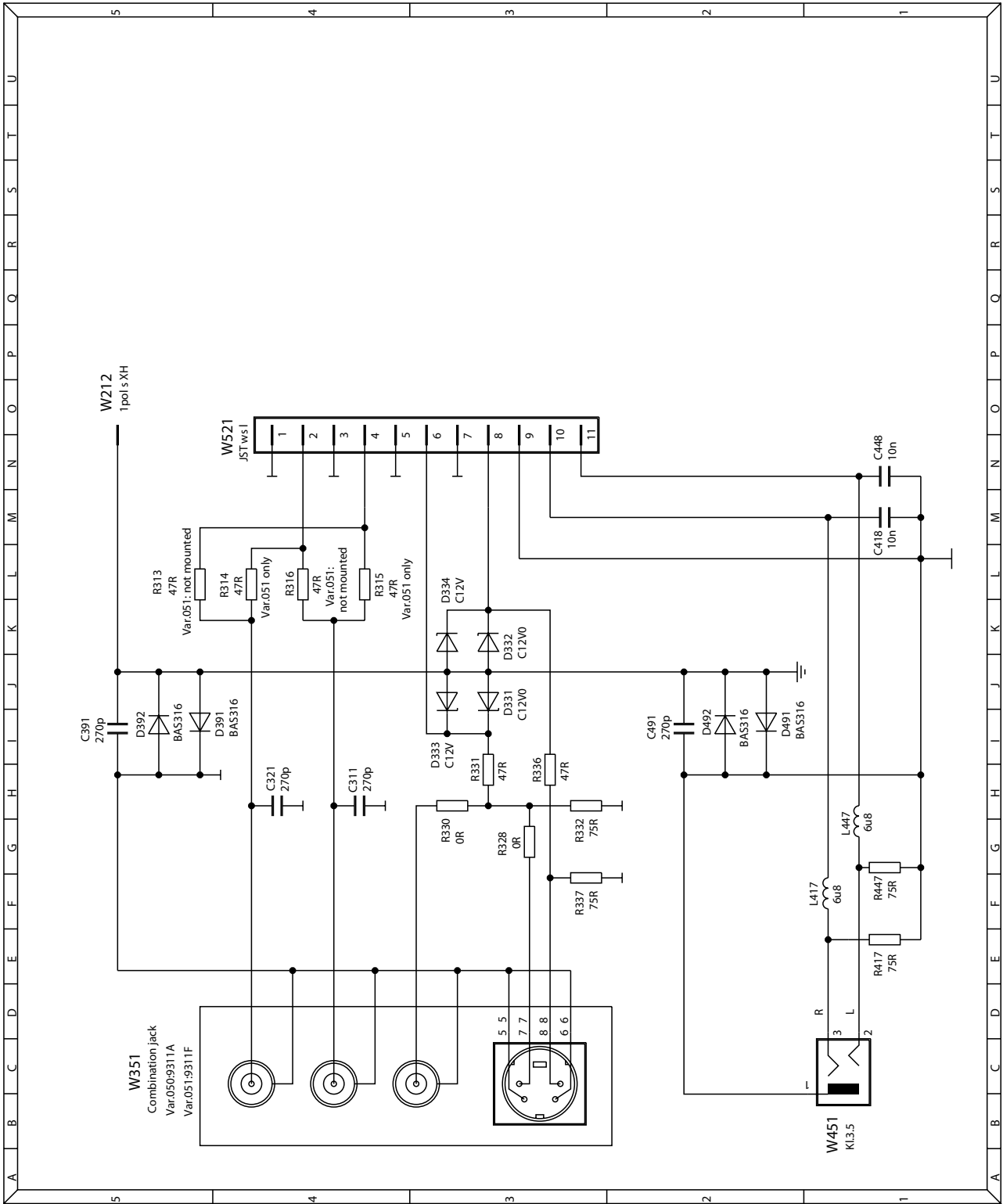
DVB-S Frontend - components side



DVB-S Frontend - solder side

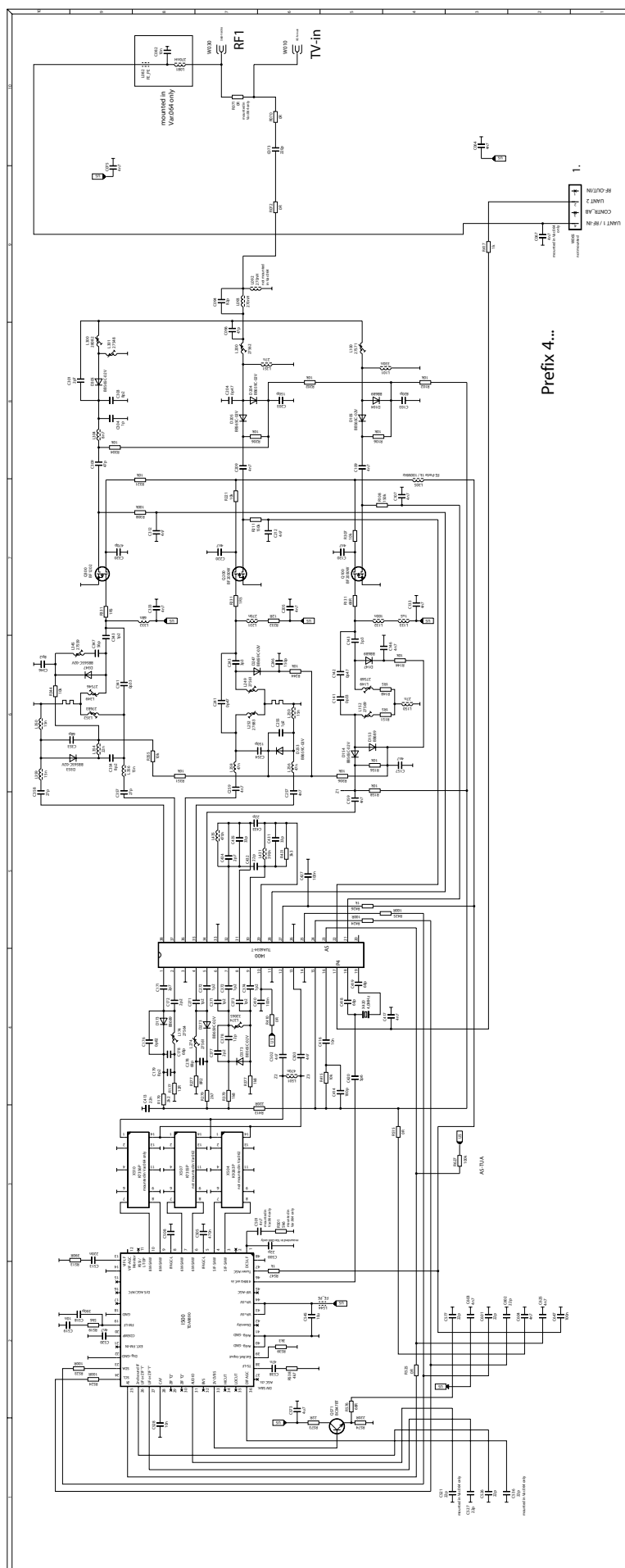


AV connector board L2650  
Var. 050/051

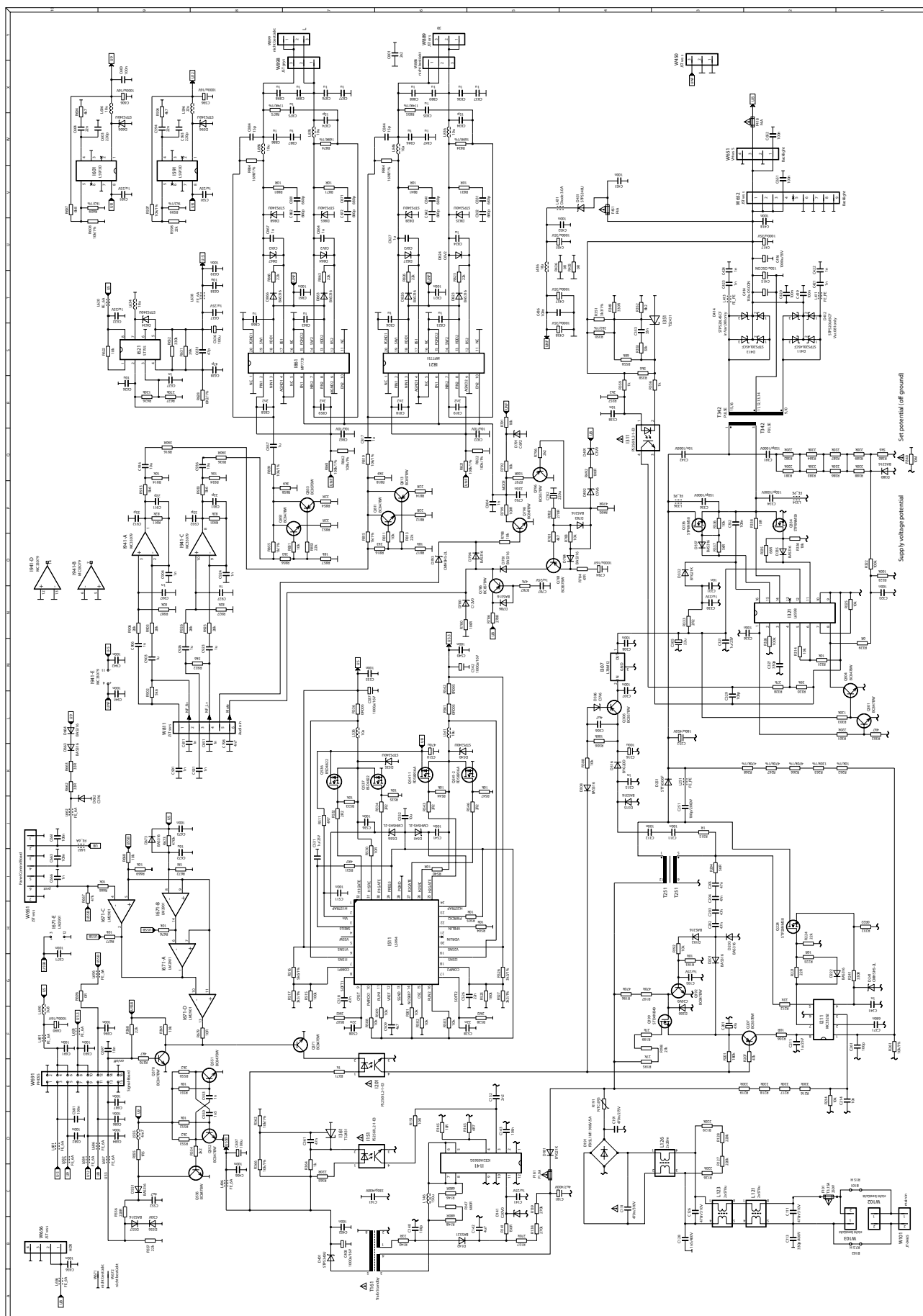










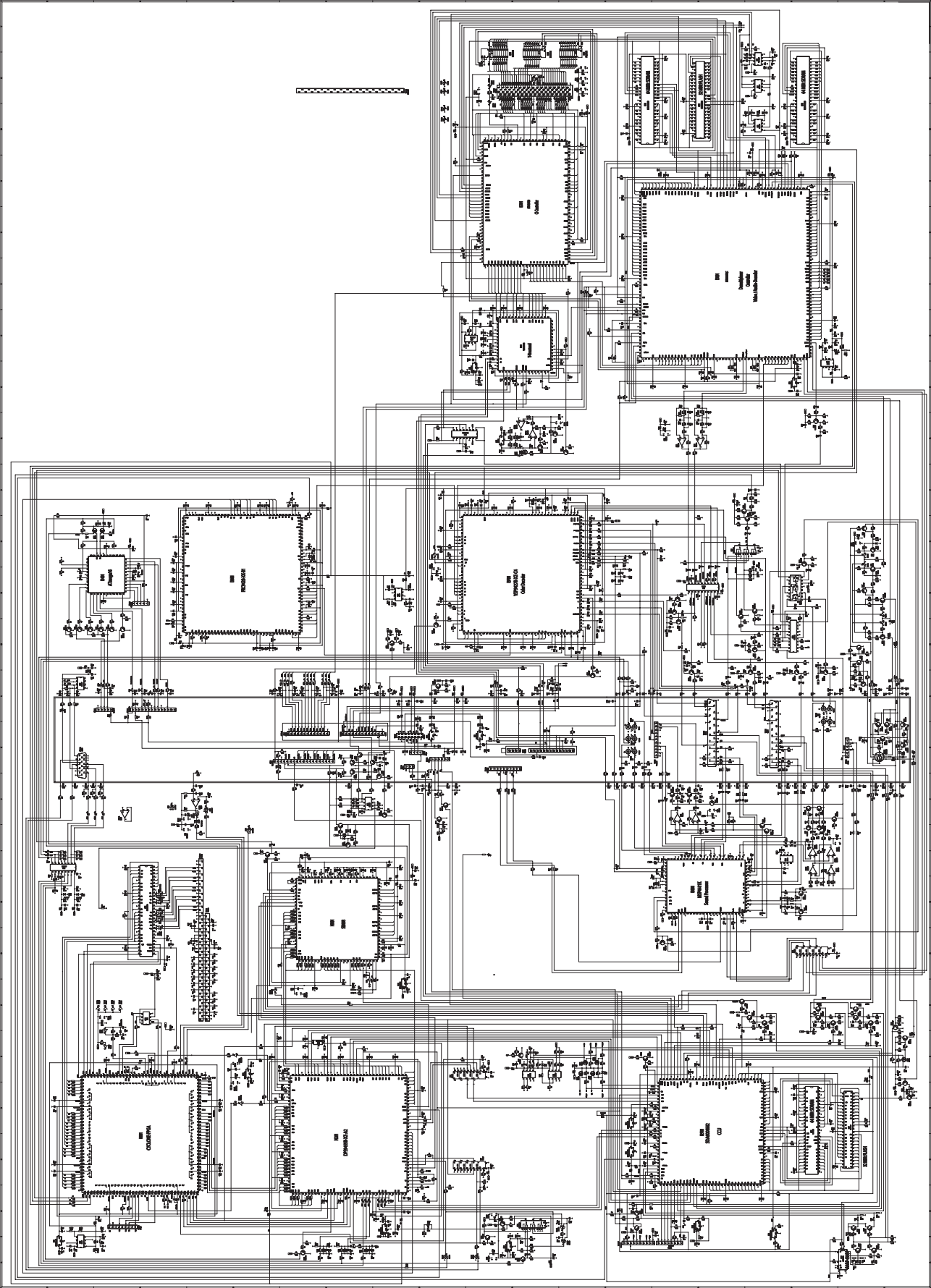










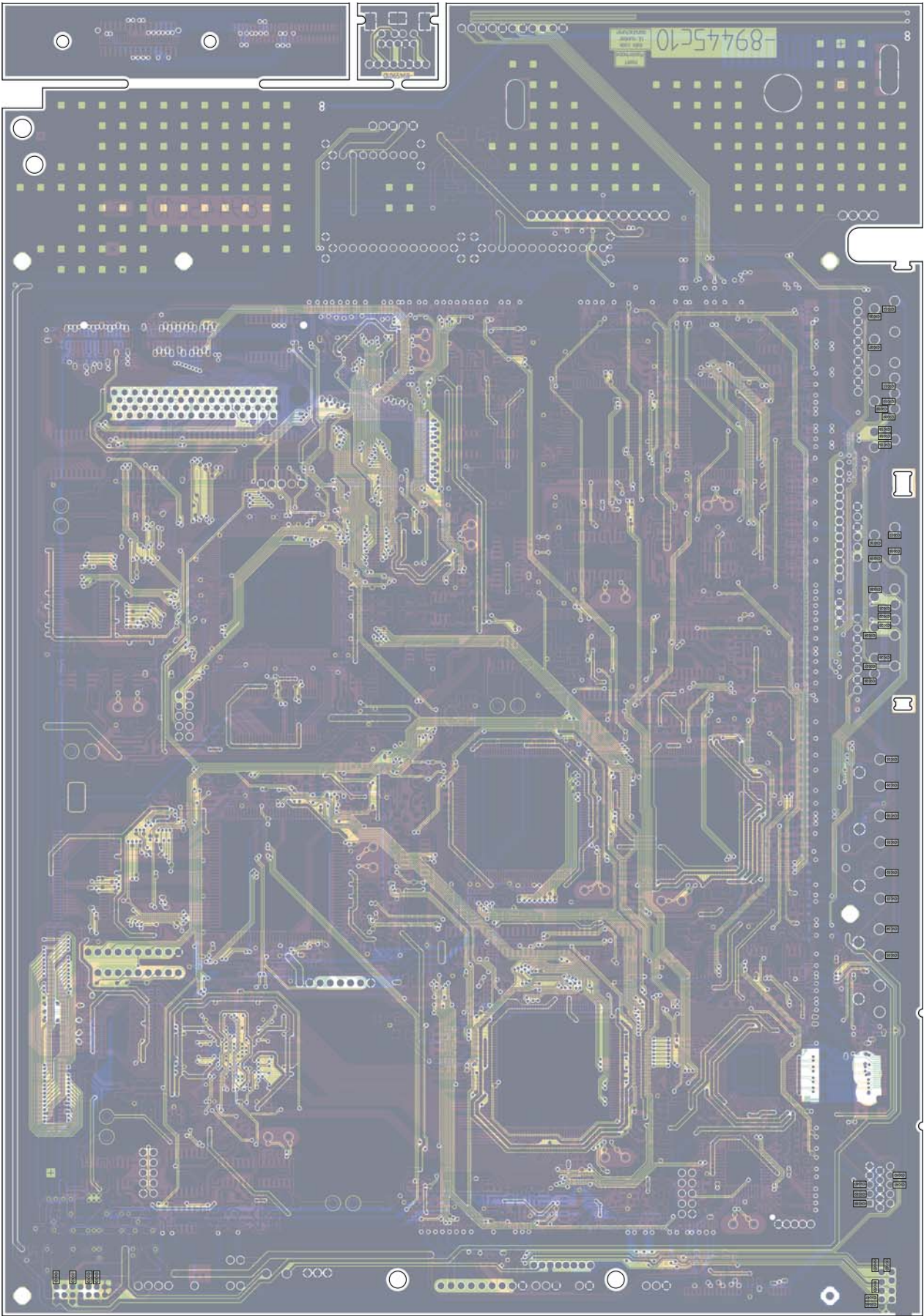


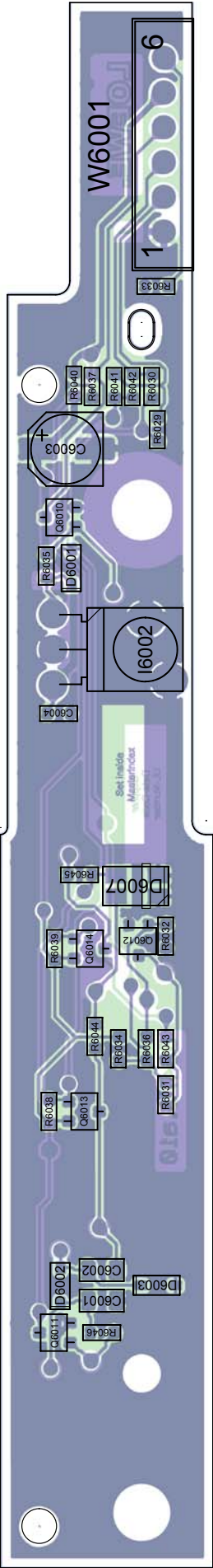




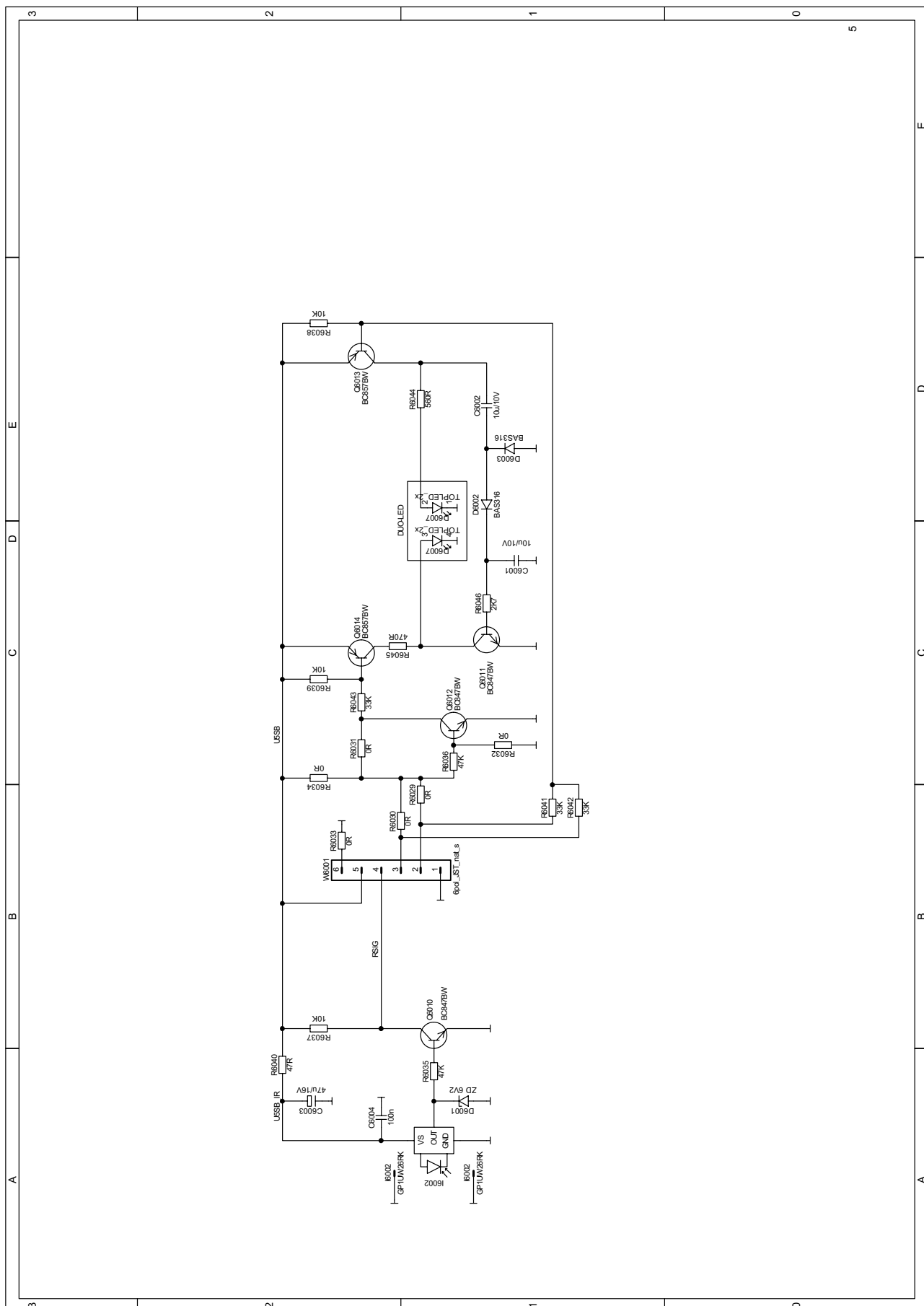


Signalboard - solder side

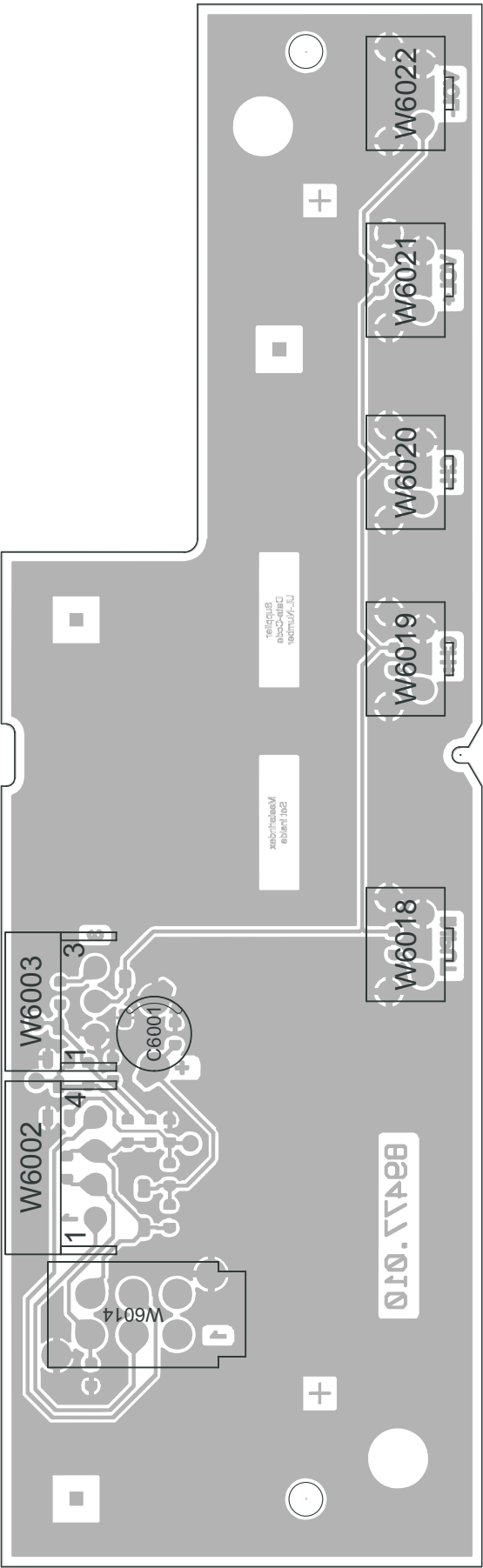




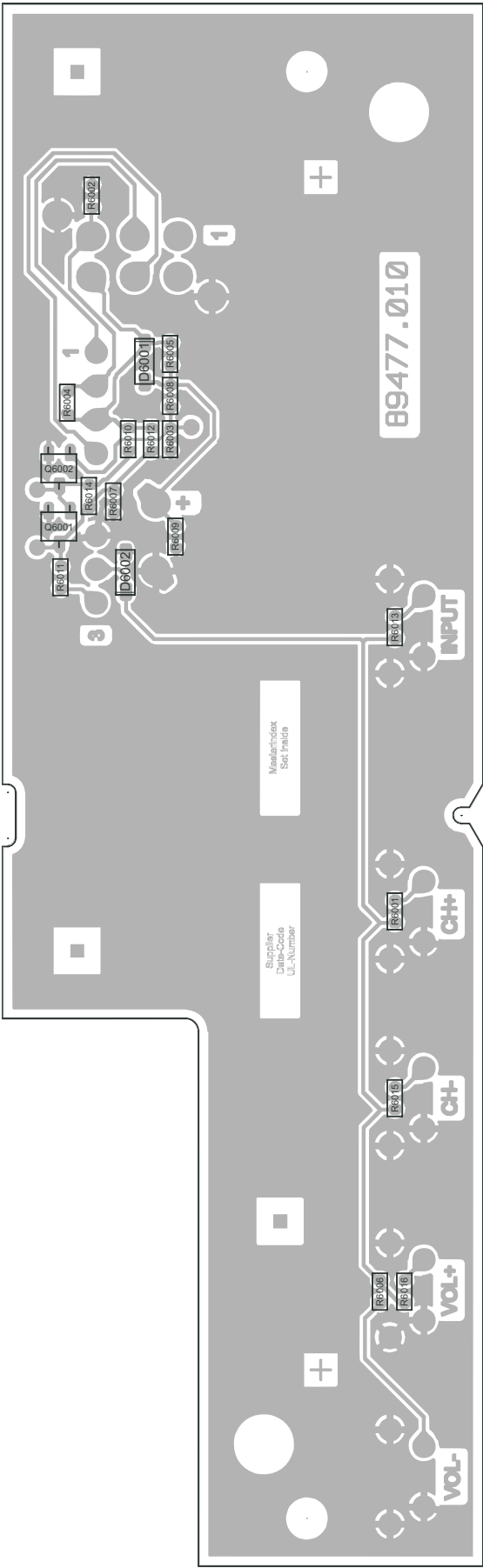
IR Receiver/LED Sharp GD7 89476A Components side

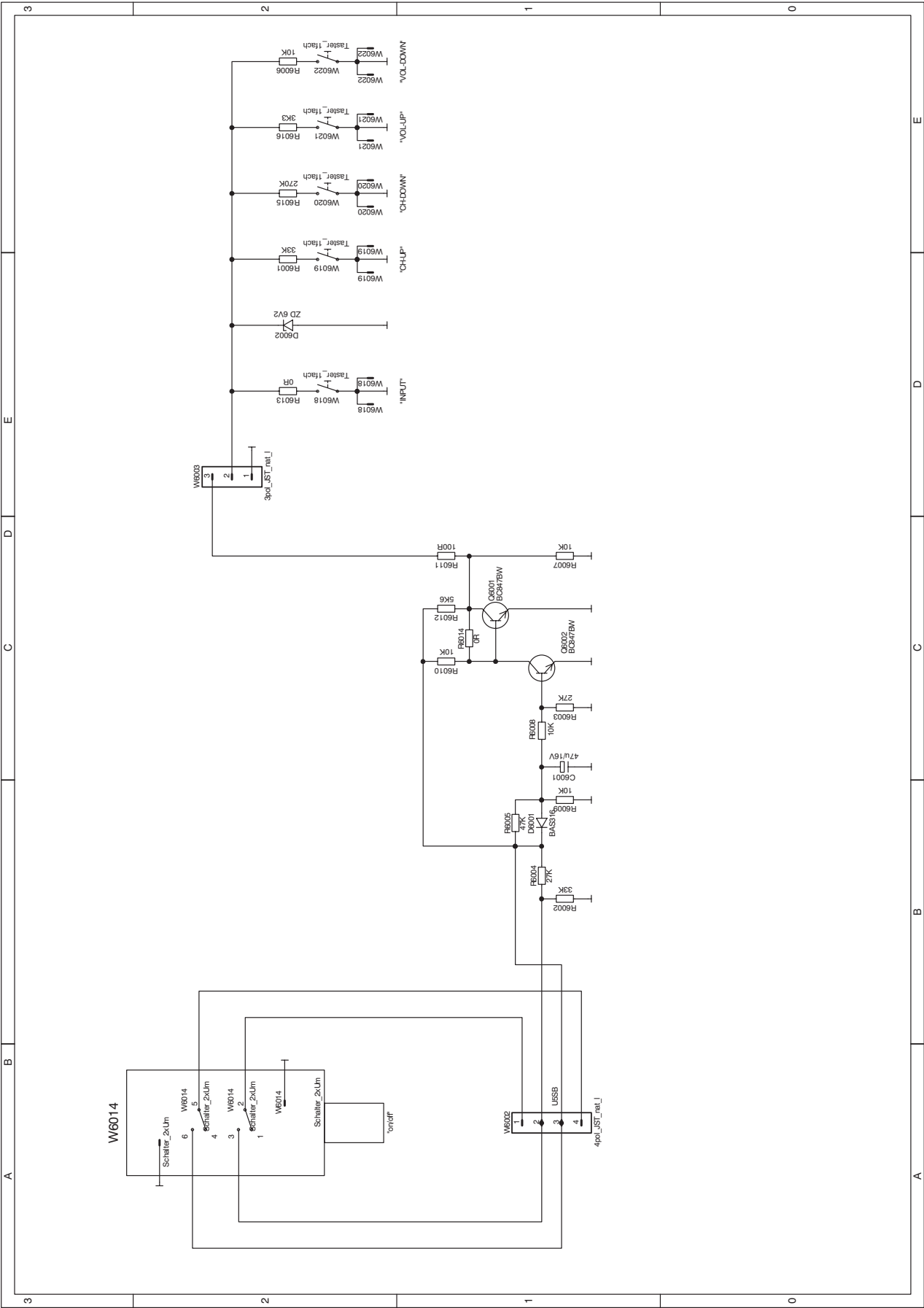


Components side

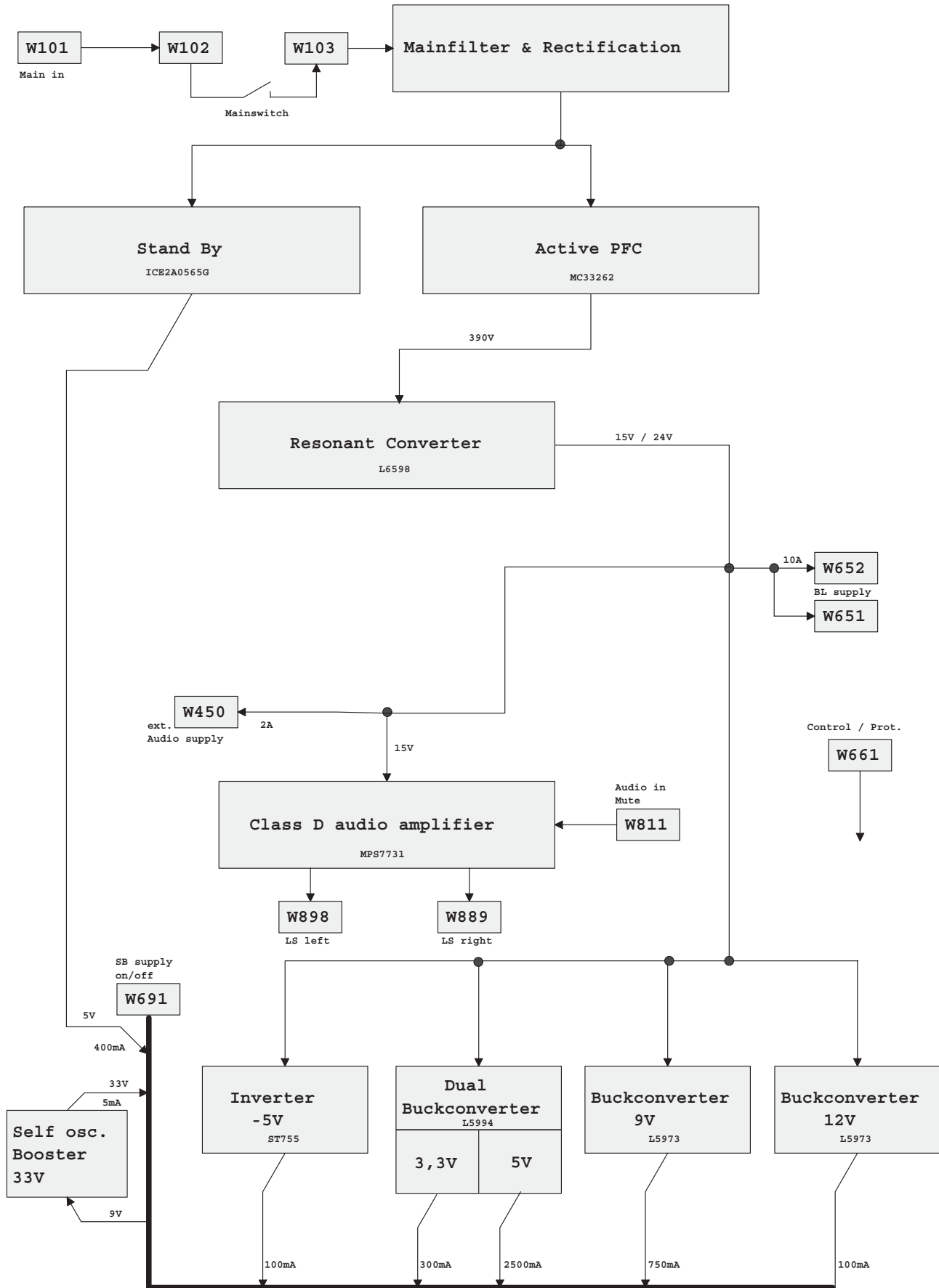


Solder side

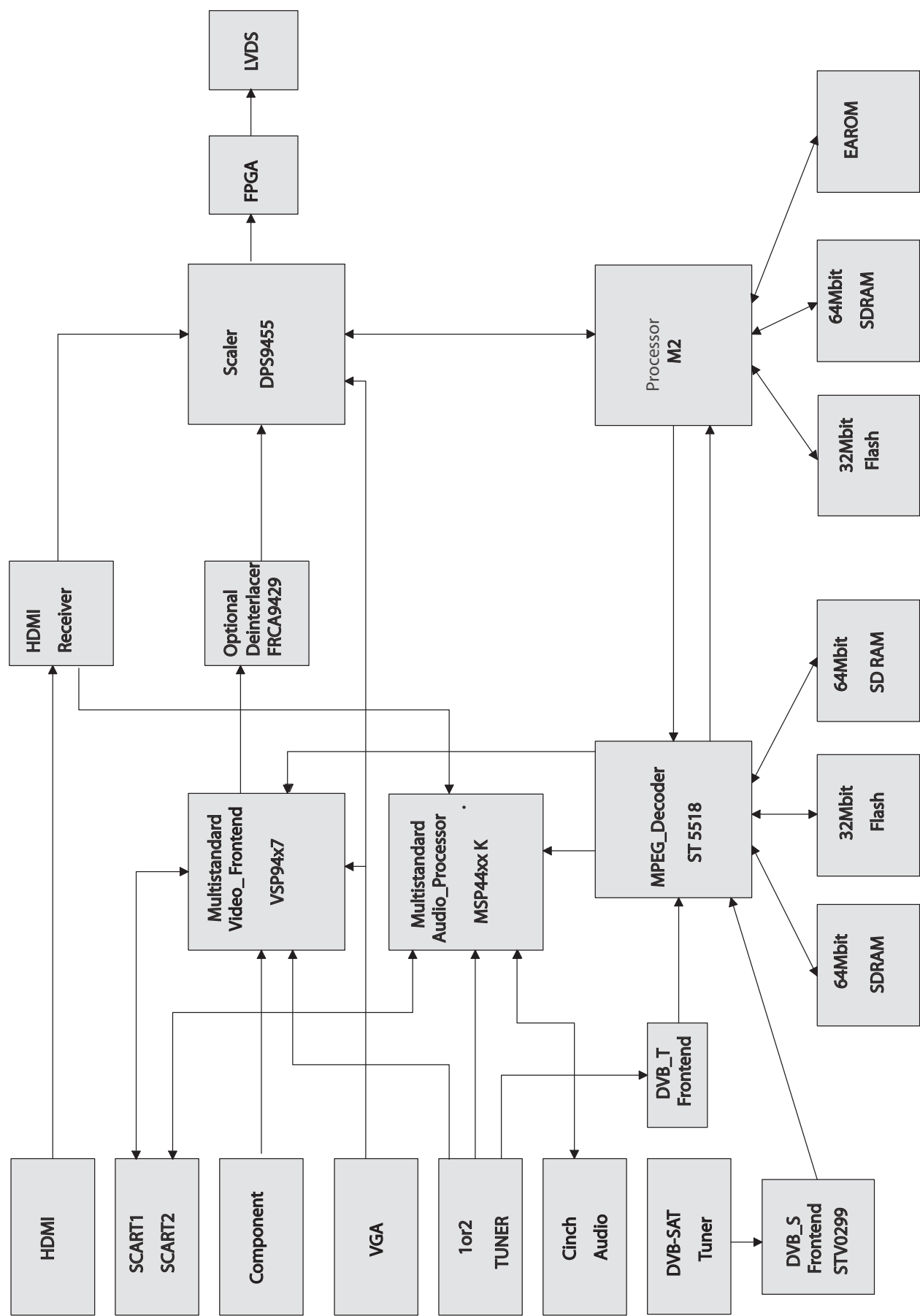




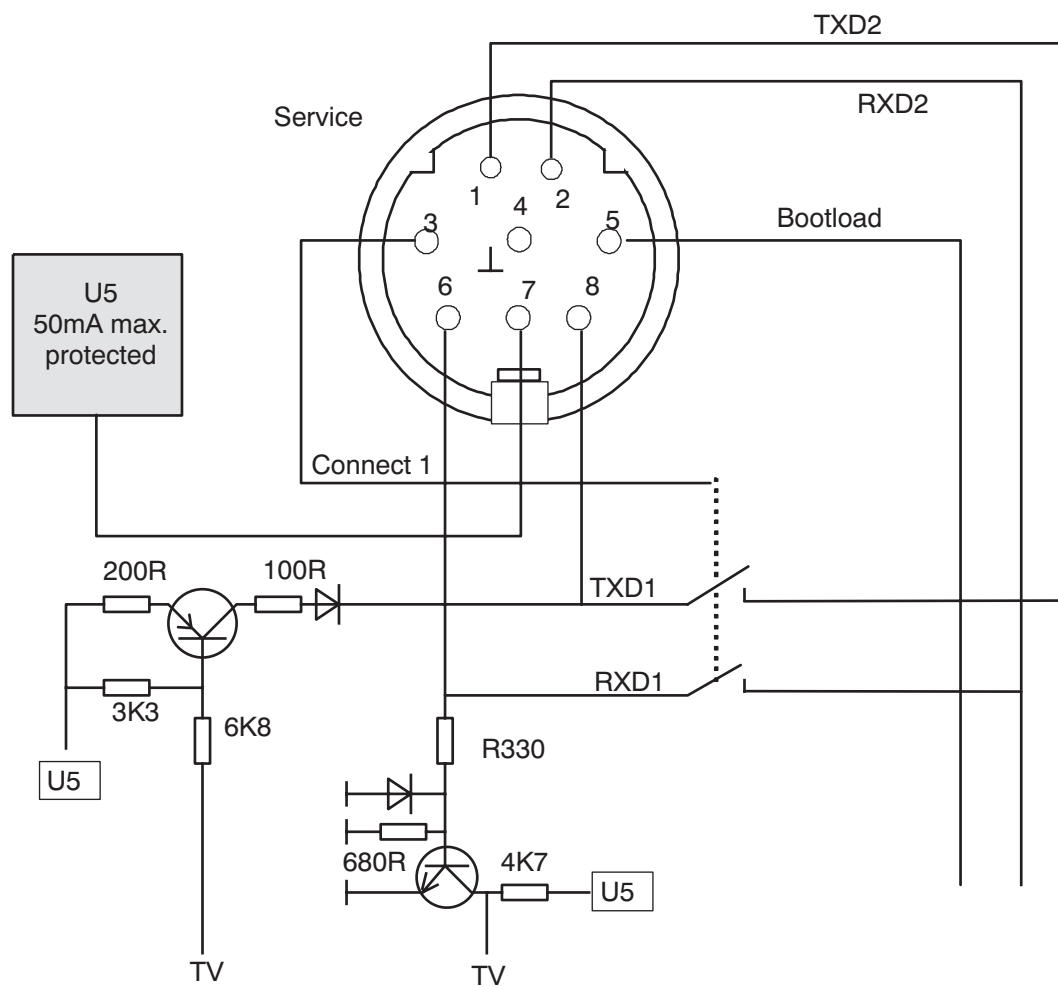
## Block diagram basicboard



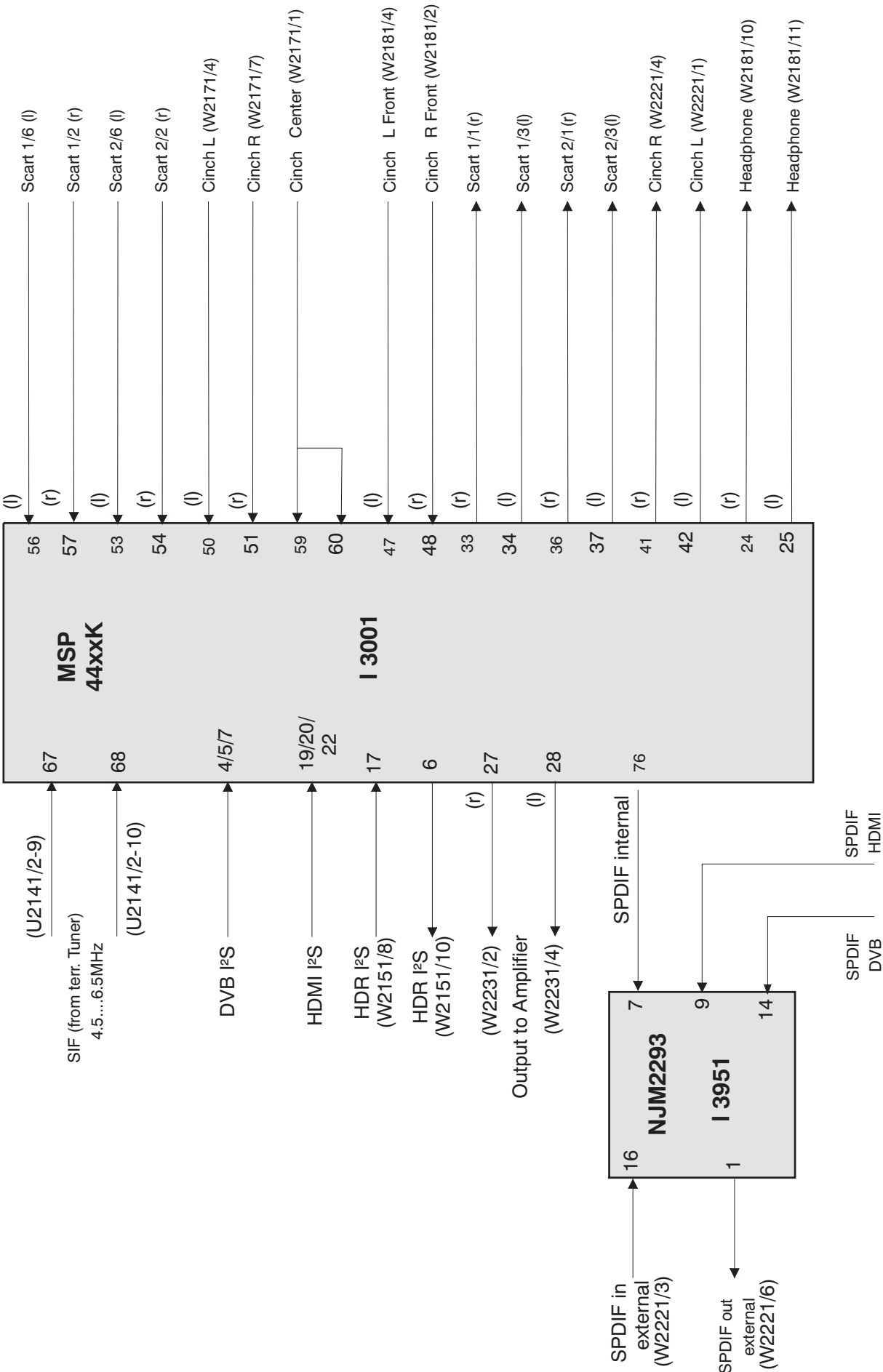
Block diagram signalboard



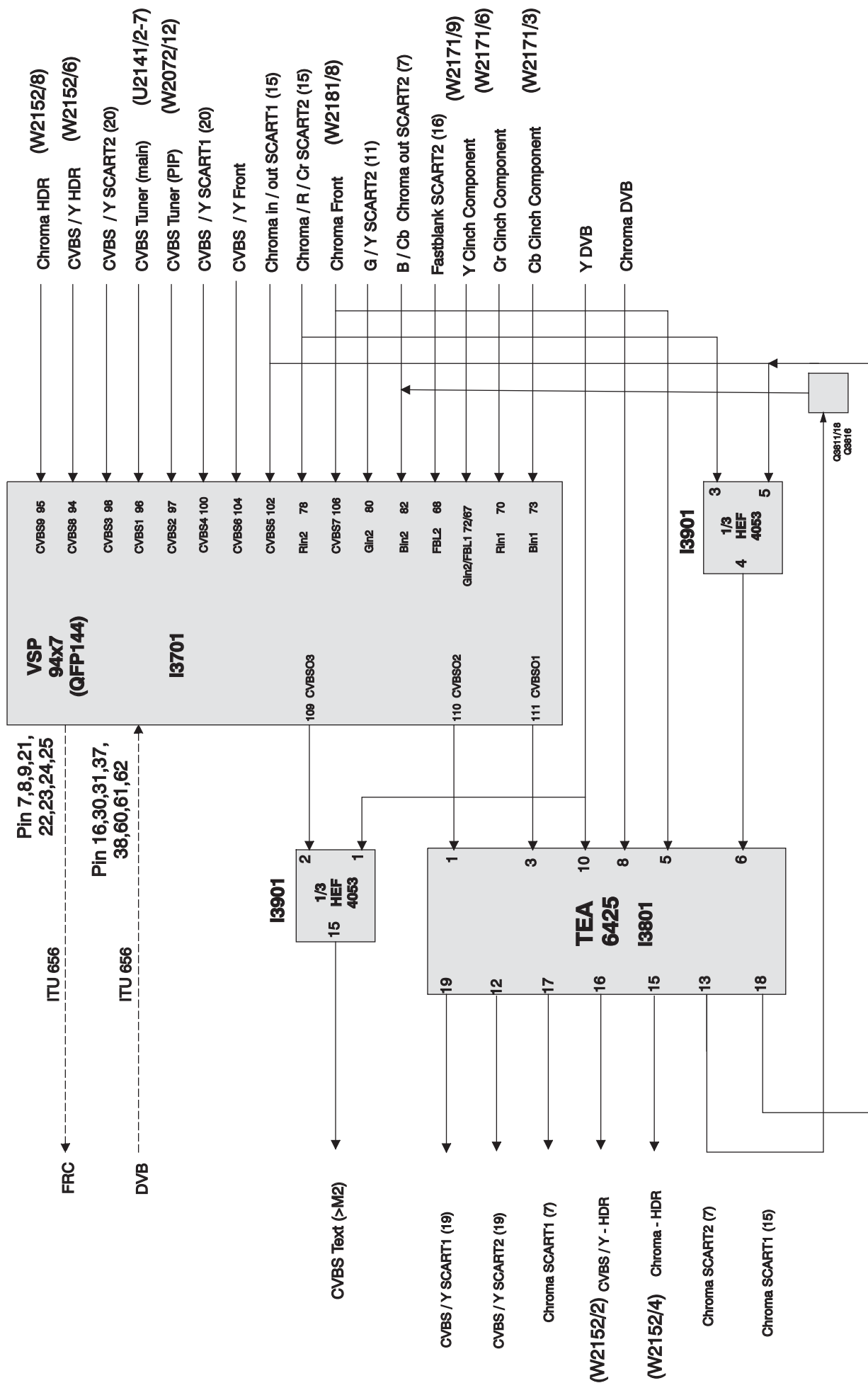
## Service interface



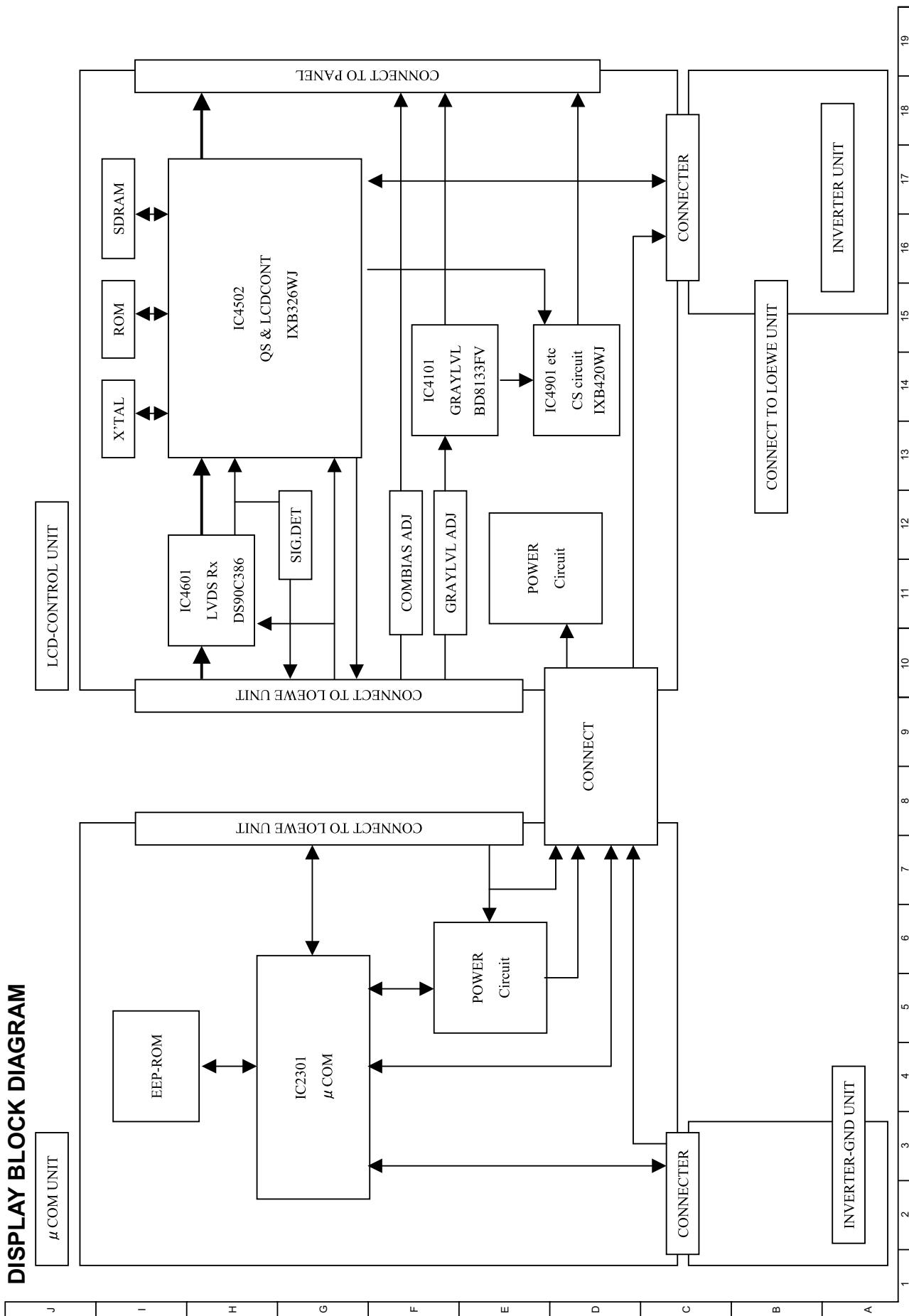




## Signal path video



# DISPLAY BLOCK DIAGRAM



# DESCRIPTION OF SCHEMATIC DIAGRAM

## VOLTAGE MEASUREMENT CONDITION:

1. The voltages at test points are measured on exclusive AC adaptor and the stable supply voltage of AC 120V. Signals are fed by a color bar signal generator for servicing purpose and the above voltages are measured with a 20k ohm/V tester.

## INDICATION OF RESISTOR & CAPACITOR:

### RESISTOR

1. The unit of resistance " $\Omega$ " is omitted.  
(K=k $\Omega$ =1000  $\Omega$ , M=M $\Omega$ ).
2. All resistors are  $\pm 5\%$ , unless otherwise noted.  
(K=  $\pm 10\%$ , F=  $\pm 1\%$ , D=  $\pm 0.5\%$ )
3. All resistors are 1/16W, unless otherwise noted.

### CAPACITOR

1. All capacitors are  $\mu\text{F}$ , unless otherwise noted.  
(P=pF= $\mu\mu\text{F}$ ).
2. All capacitors are 50V, unless otherwise noted.


### CAUTION:

This circuit diagram is original one, therefore there may be a slight difference from yours.


### SAFETY NOTES:

1. DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.
2. SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.

### IMPORTANT SAFETY NOTICE:

PARTS MARKED WITH " $\triangle$ " (  ) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

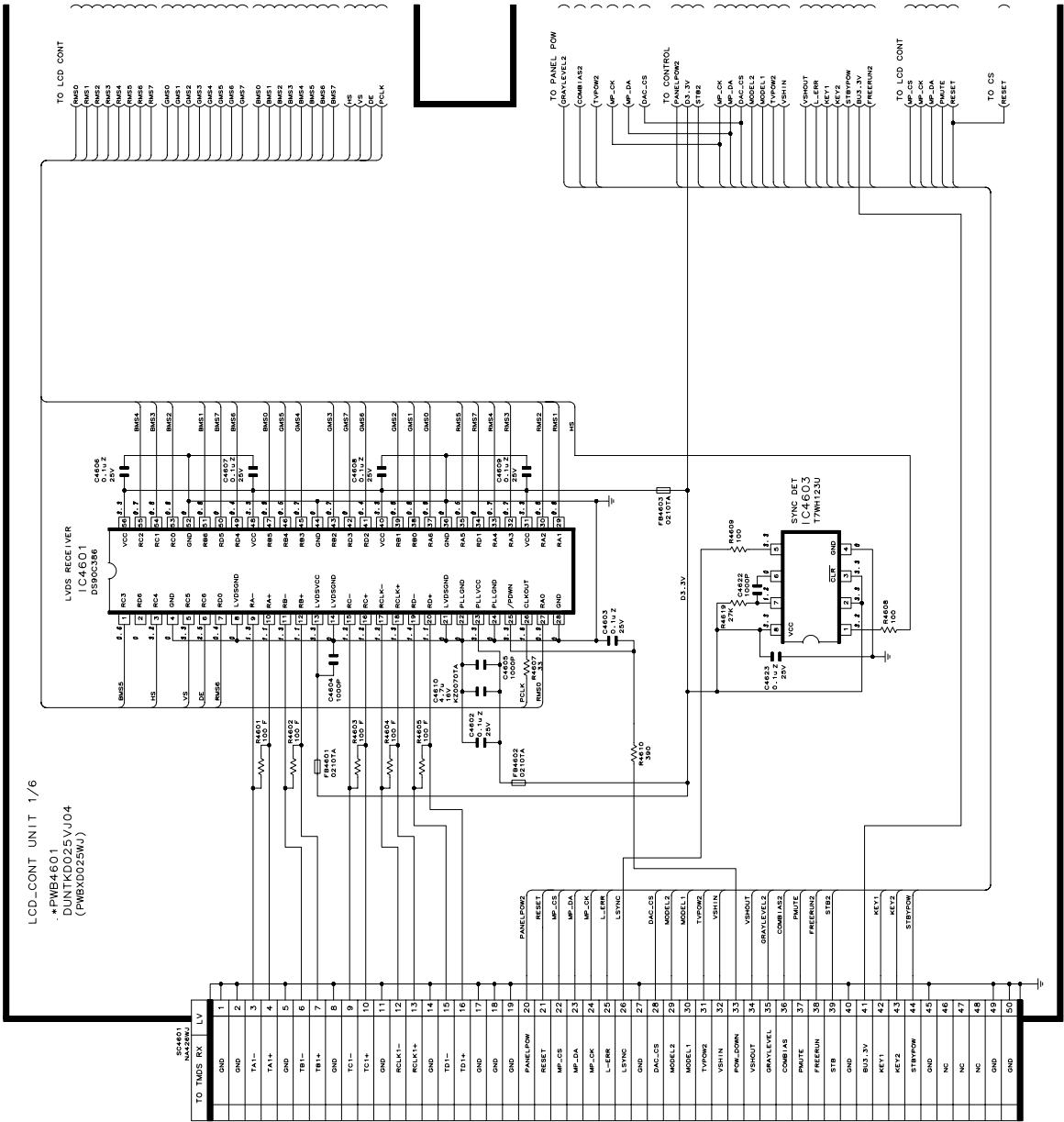
### AVIS DE SECURITE IMPORTANT:

LES PIECES MARQUEES " $\triangle$ " (  ) SONT IMPORTANTES POUR MAINTENIR LA SECURITE DE L'APPAREIL.  
NE REMPLACER CES PIECES QUE PAR DES PIECES DONT LE NUMERO EST SPECIFIE POUR MAINTENIR LA SECURITE ET PROTEGER LE BON FONCTIONNEMENT DE L'APPAREIL.

# SCHEMATIC DIAGRAM

## ■ LCD CONTROL Unit-1/6

### LCD CONT 1 (LVDS-RX)





## LCD CONT 3 (CONTROL)

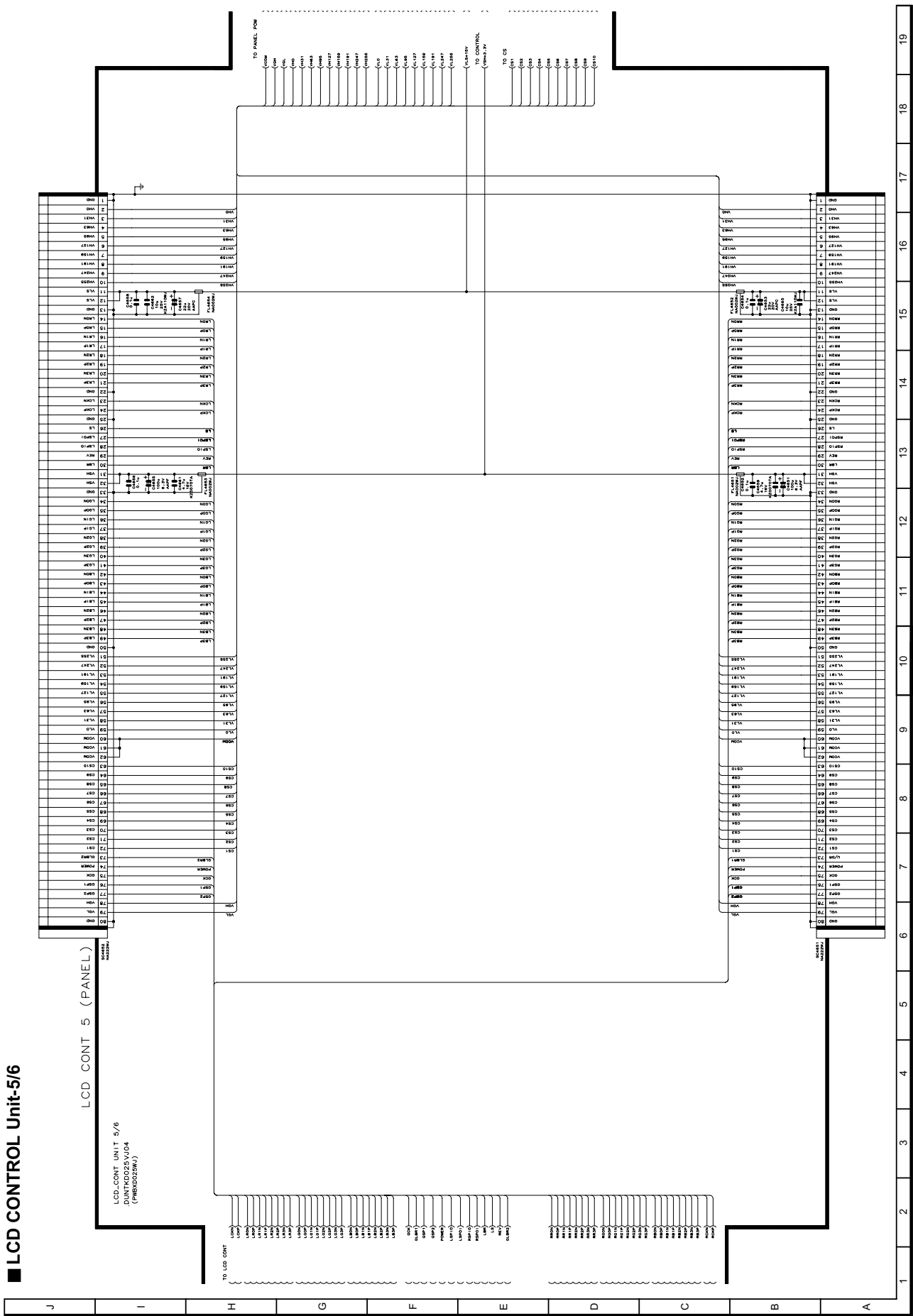


## LCD CONT 4 (PANEL POW)

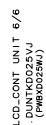




# ■ LCD CONTROL Unit-5/6



## LCD CONT 6 (CS)



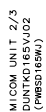
1

100

100



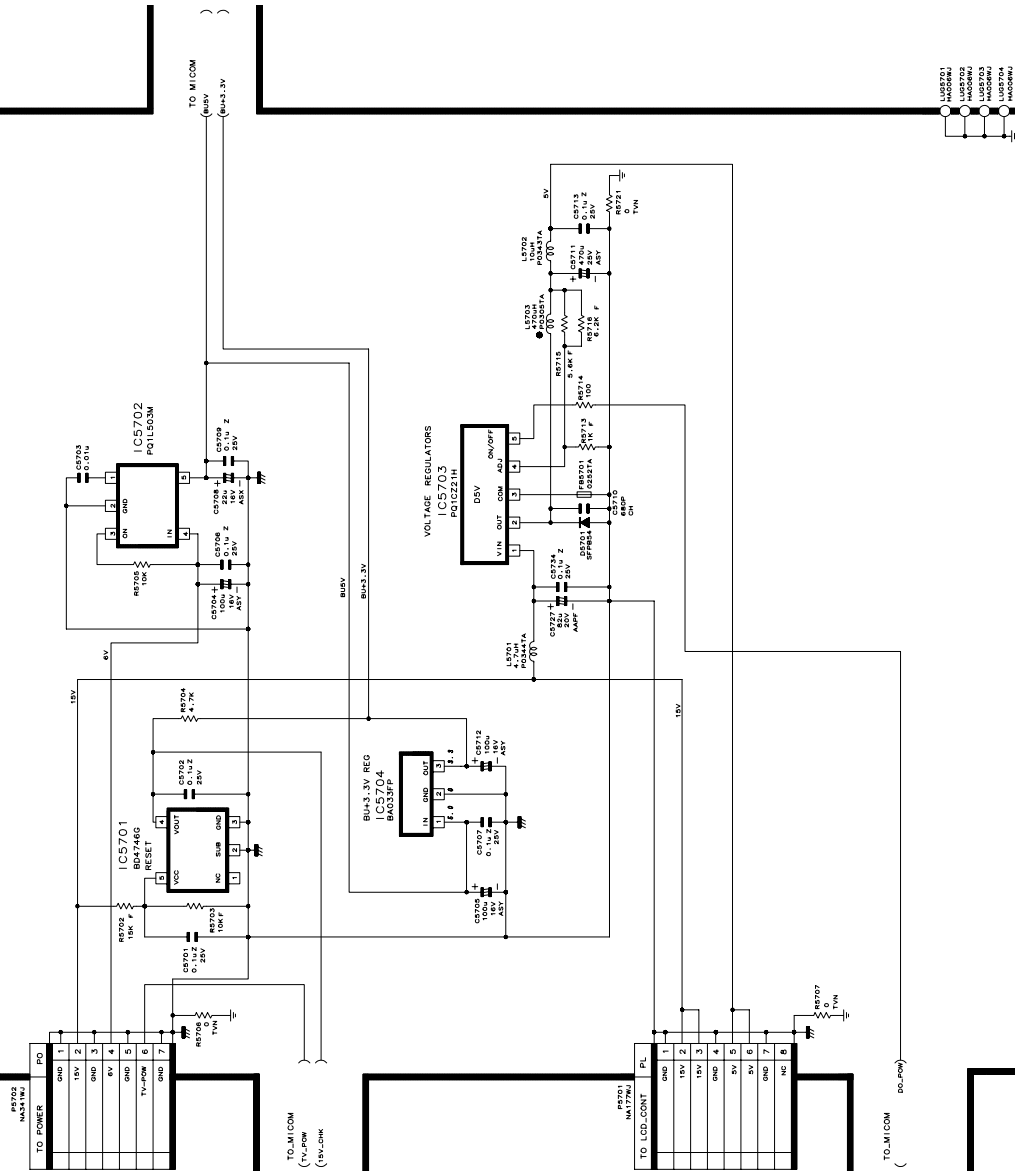
## MICOM2(MICOM)



# ■ MICRO PROCESSOR Unit-3/3

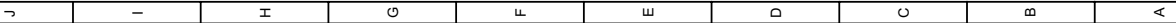
## MICOM3 (POWER)

MICOM UNIT 3/3  
DUNT0165VJ02  
(PWBSD165W4)





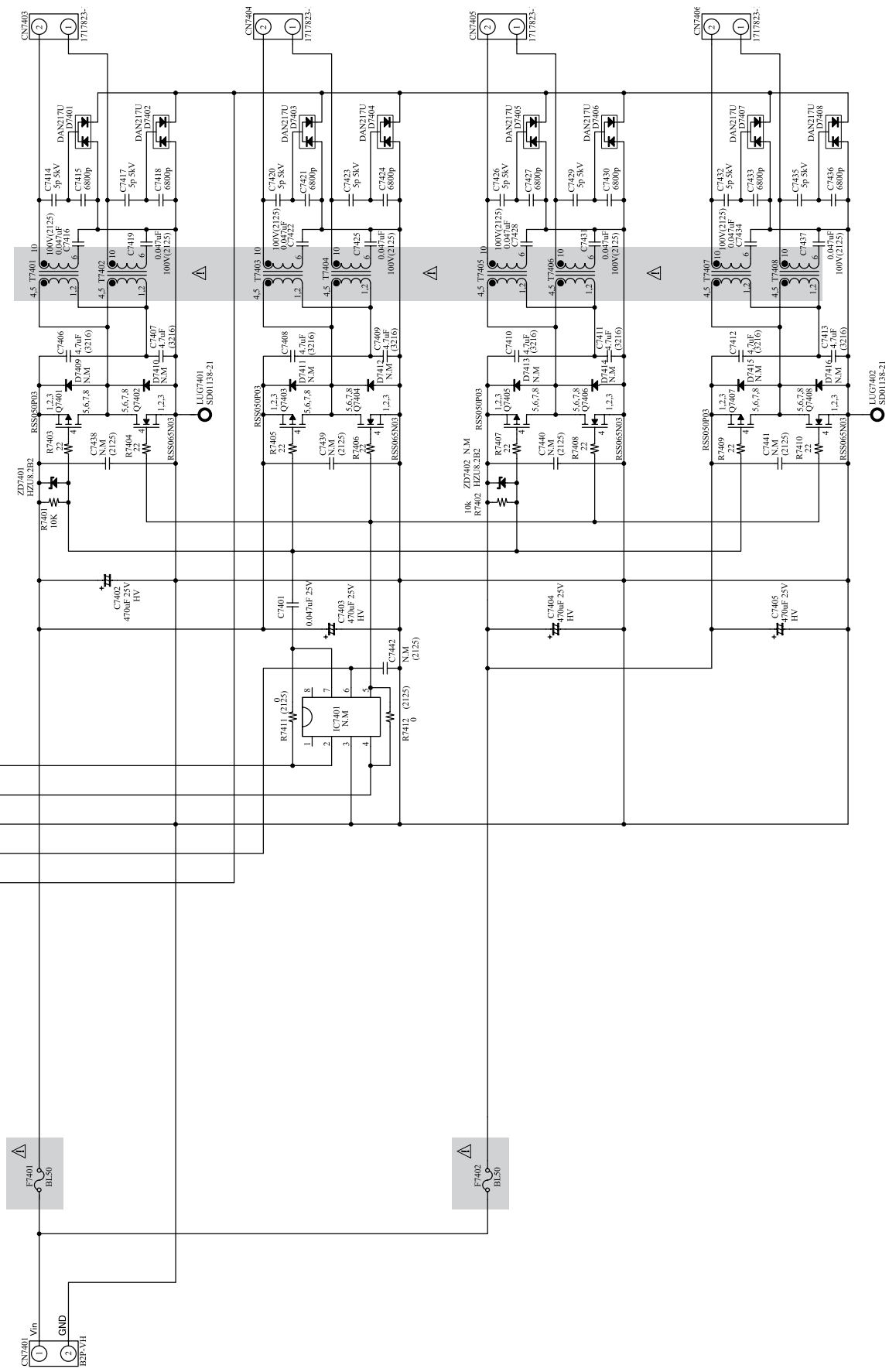
10



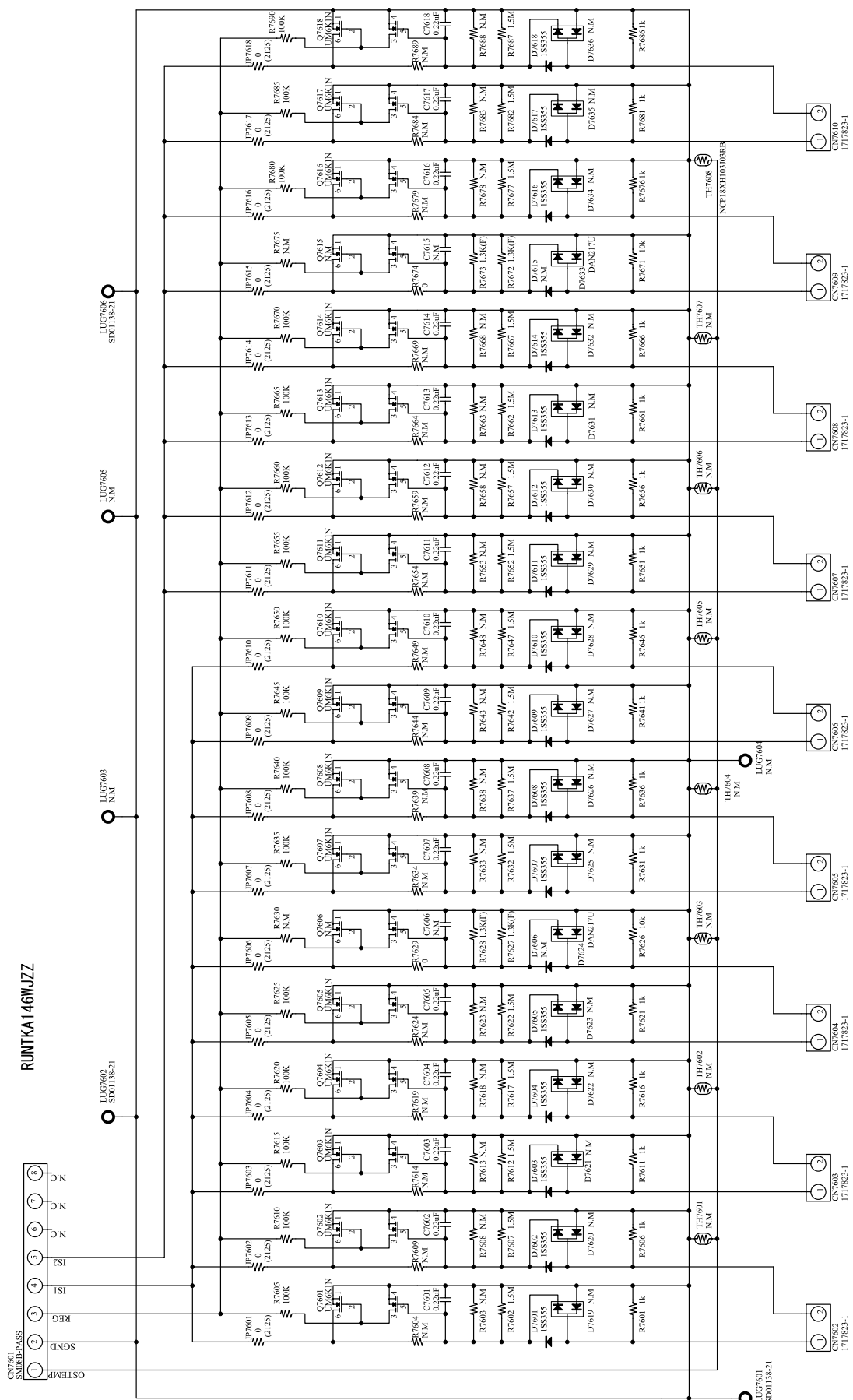
# ■ INVERTER-2 Unit

RUNTKA145WJZZ

VS2 VCC GND N2 P2  
CN7402 05R-PJ



# INVERTER GND Unit

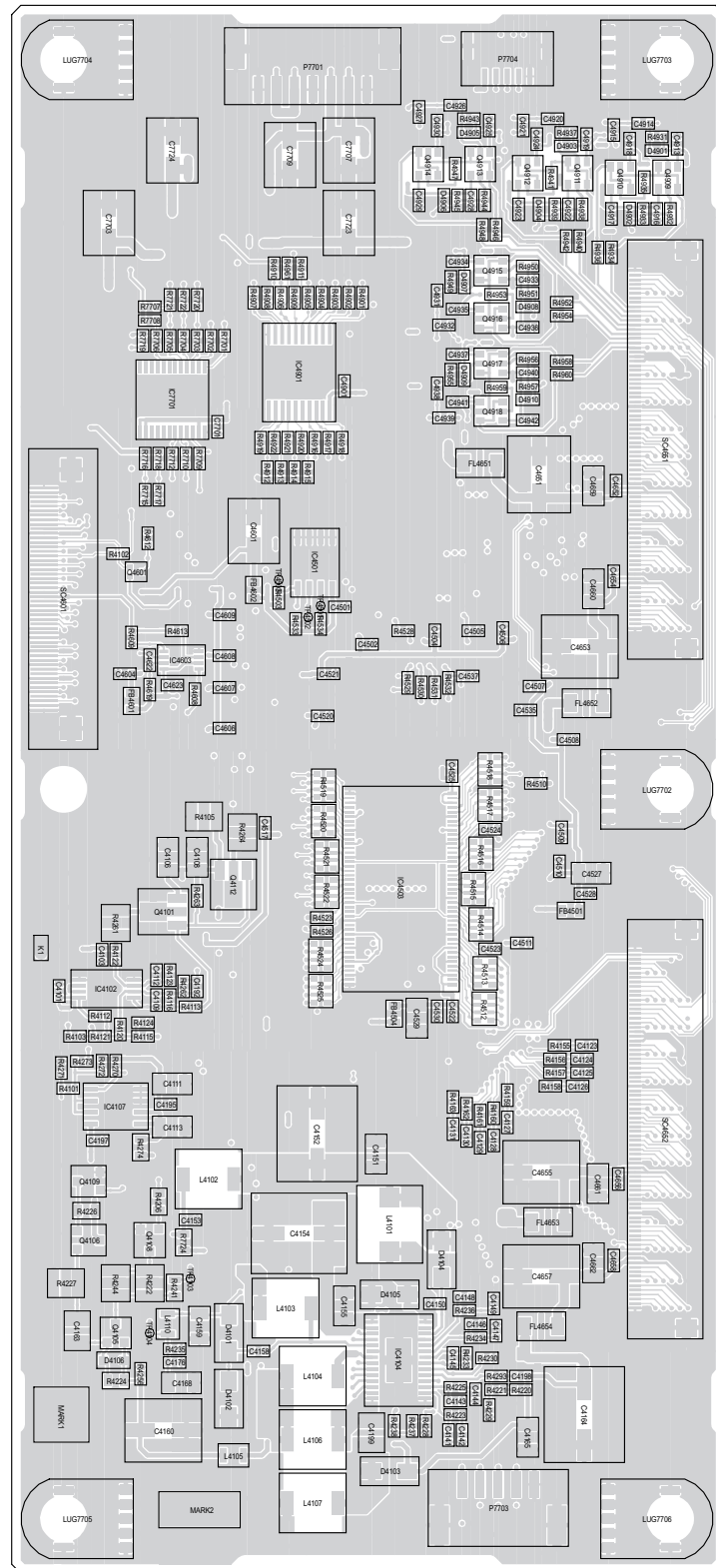


RUNTKA146WJZZ

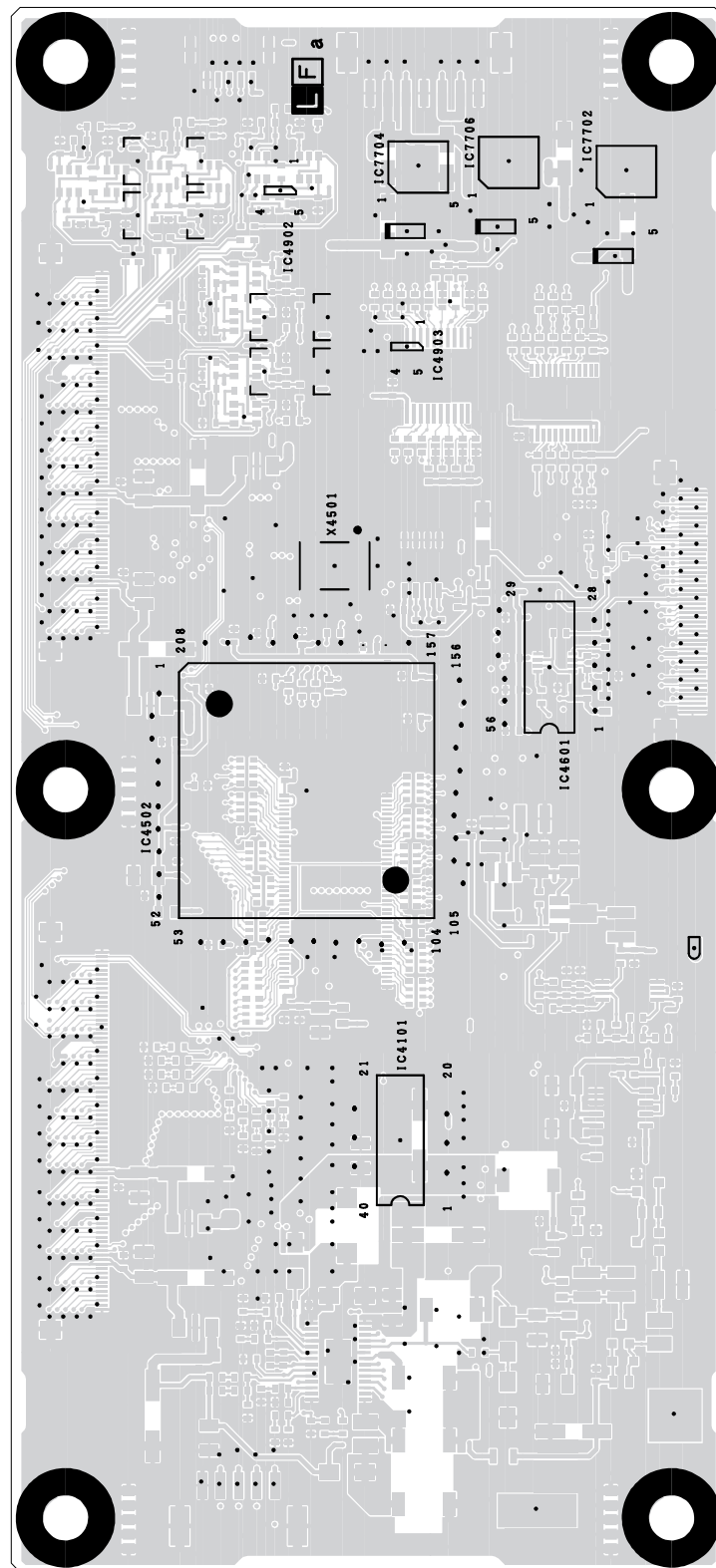


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**6**

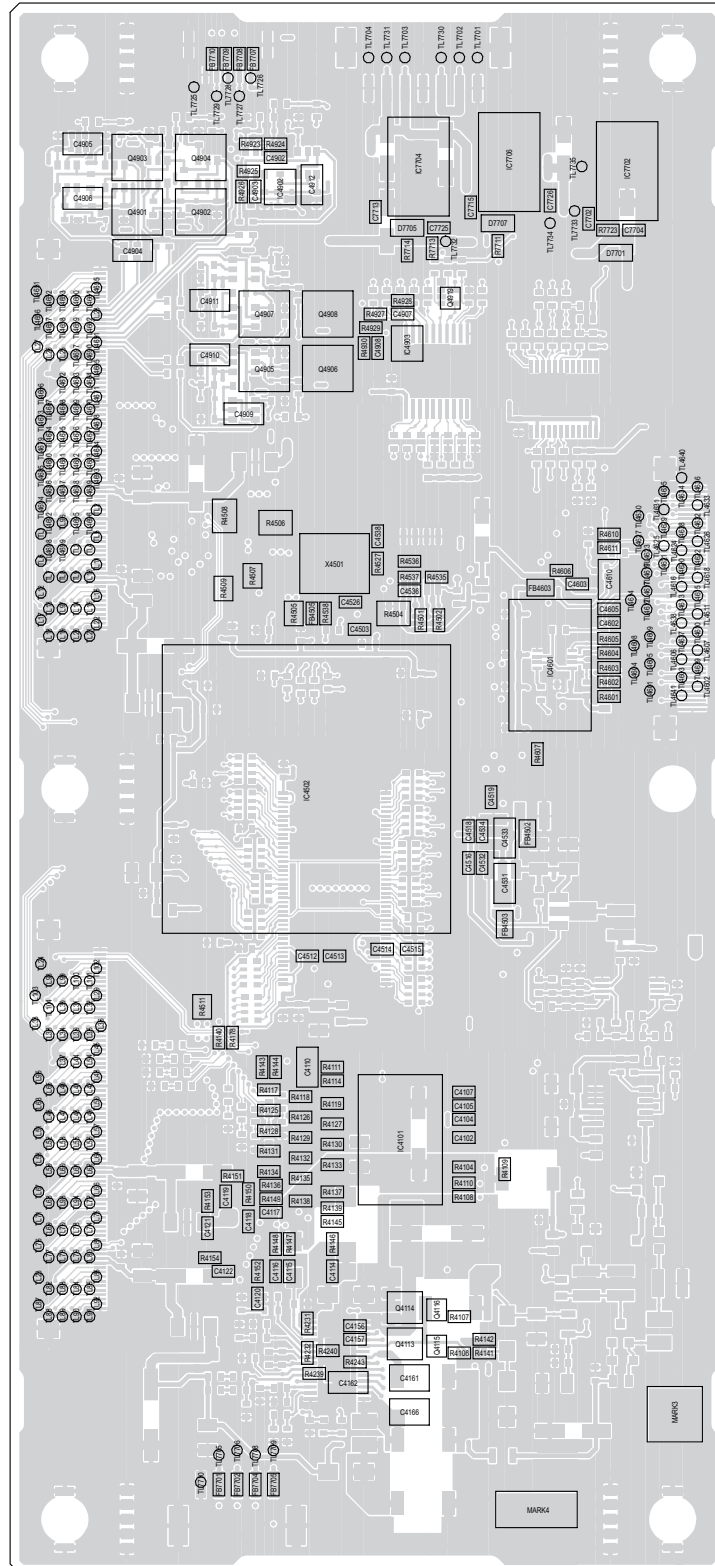


	A	B	C	D	E	F	G	H
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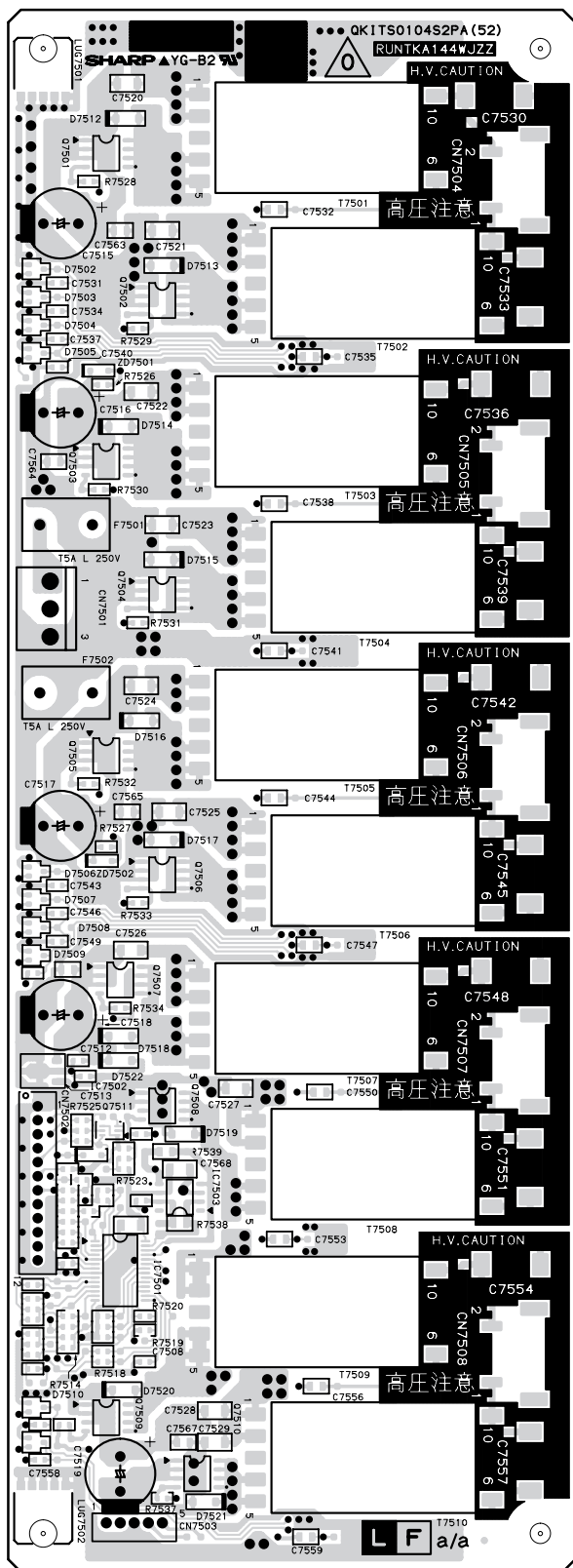
**LCD CONTROL Unit (Side-B)**

1	2	3	4	5	6
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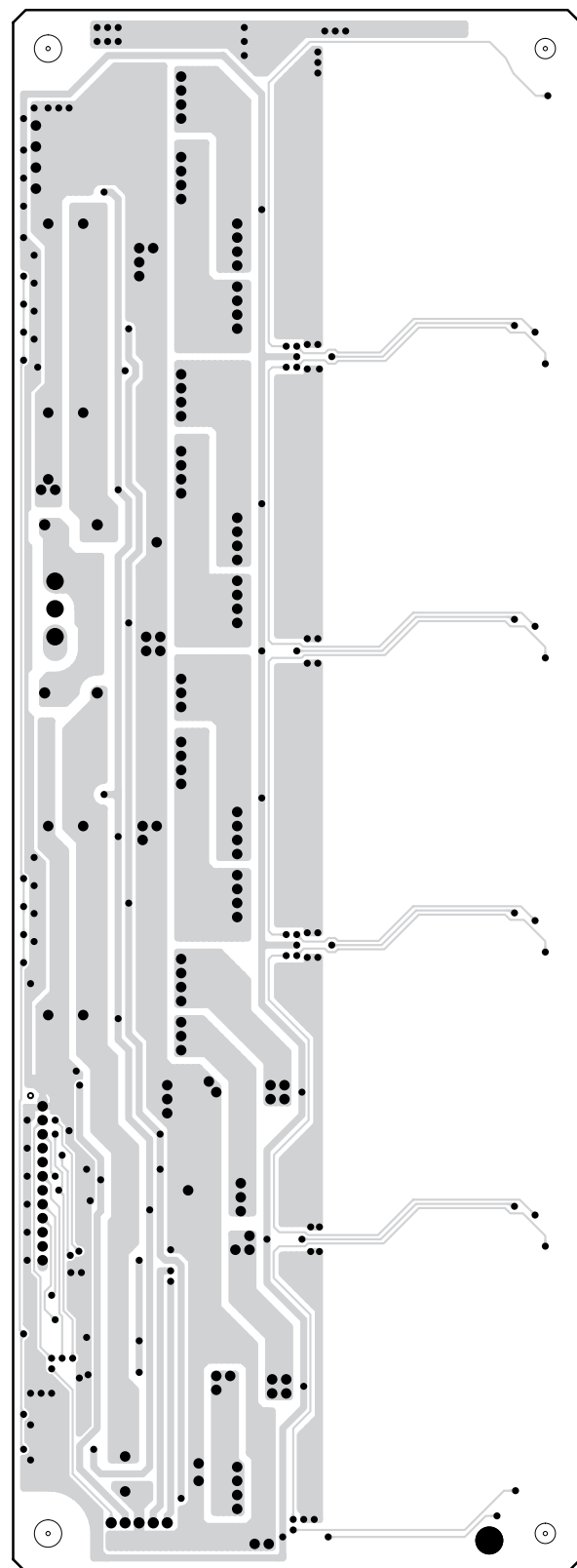


**LCD CONTROL Unit (Chip Parts Side-B)**

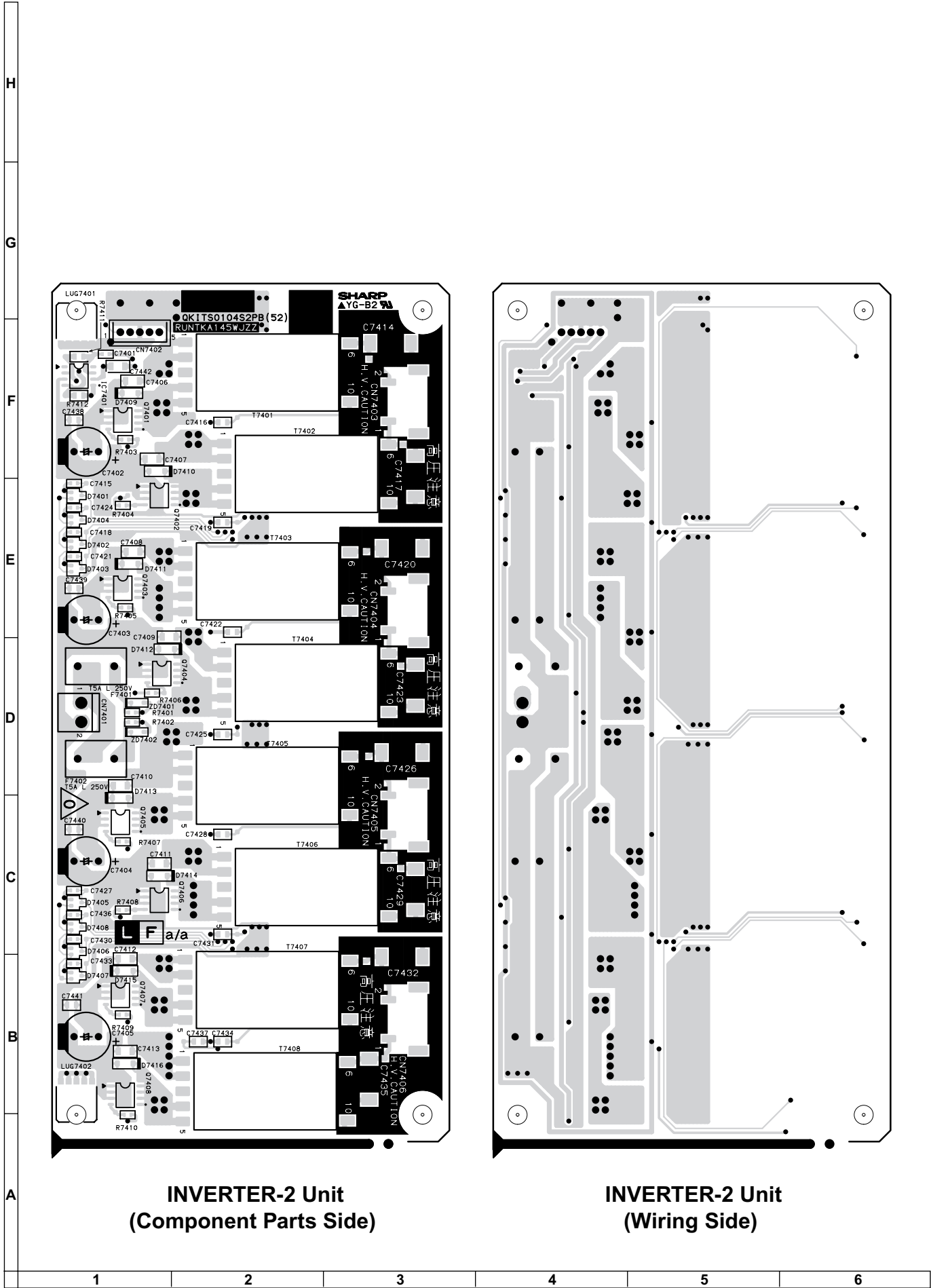




**INVERTER-1 Unit  
(Component Parts Side)**



**INVERTER-1 Unit  
(Wiring Side)**



**INVERTER GND Unit  
(Component Parts Side)**

